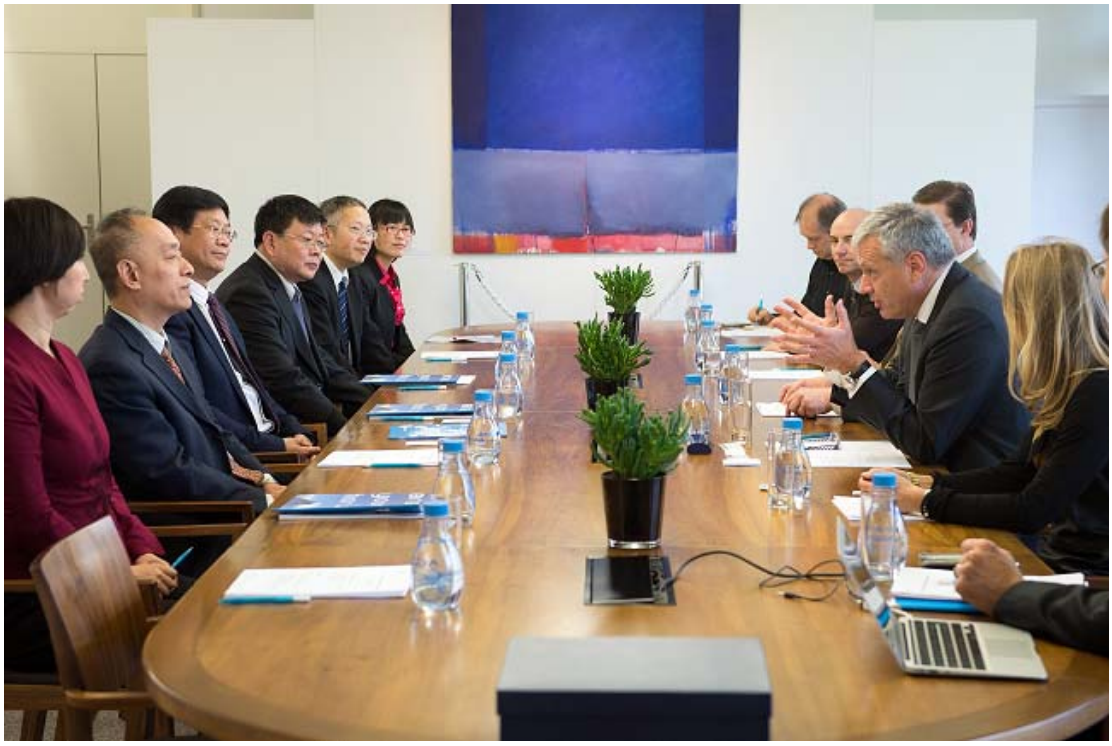
Collaborative Innovation Center of Judicial Civilization, China

2015 International Symposium on Sino Swiss Evidence Science

Jan. 19 - 21, 2015

Haikou, Hainan Province, China

Symposium Program



Registration

January 18th, 2015

New Port Resort Haikou, Hainan Province

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The 2015 International Symposium on Sino Swiss Evidence Science (ISSSES 2015) will be held in Hainan, China during January 19th and 23rd 2015. The symposium provides a forum for discussions of the current breakthroughs and new directions in the field of evidence science. The symposium is being organized by the Sino Swiss Evidence Science Research Center (SSESRC) and chaired by Professor Baosheng ZHANG, who is currently the vice president of CUPL and the chairman of Collaborative Innovation Center of Judicial Civilization, China.

ISSSES 2015 will be the first international symposium of SSESRC, which aims to win high reputation in the field of evidence science. The symposium will invite prestigious scholars from China, Switzerland as well as other overseas countries, in order to give keynote speeches and share their latest discoveries in the practice of evidence science.

ORGANIZATION

Organizing Committee:

Baosheng ZHANG, Christophe CHAMPOD, Lin CHANG

Organized by:

Sino Swiss Evidence Science Research Center

Held by:

Key Laboratory of Evidence Science

China University of Political Science and Law

PROGRAM

The following topics will be preferred (but not be restricted to)

- ✧ How can forensic science promote judicial civilization?
- ✧ Law issues inside forensic science

PRESENTATION FORM AND LANGUAGE

The only official language of the symposium is English. All the presentations and discussions should be given in English. Simultaneous interpretation from English to Chinese will be arranged by the organize committee if the presentation is in English.

Day 1: January 19th, 2015 (Monday) Place: Law school, Hainan University	
8:30	Conference bus to the Law School of Hainan University (~15min)
9:00-10:15	Workshop 1 -part 1,**Probability as a tool in plausible reasoning**, Ronald J. ALLEN, Wigmore Professor of Law, Northwestern University, U.S.A.
10:15-10:45	Coffee break
10:45-12:00	Workshop 1 -part 2,**Probability as a tool in plausible reasoning**, Ronald J. ALLEN, Wigmore Professor of Law, Northwestern University
12:10	Conference bus to the New Port Resort Haikou (~15min)
12:30-14:00	Lunch buffet & rest time, New Port Resort Haikou
14:10	Conference bus to the Law School of Hainan University (~15min)
14:30-15:45	Workshop 2 –part1**A Standard (guideline) for reporting evaluative evidence in Court**. Christophe CHAMPOD &Alex BIEDERMANN, Professors, University of Lausanne, Switzerland.
15:45-16:15	Coffee break
16:15-17:30	Workshop 2 -part 2**A Standard (guideline) for reporting evaluative evidence in Court**. Christophe CHAMPOD &Alex BIEDERMANN, Professors, University of Lausanne, Switzerland.
17:40	Conference bus to the New Port Resort Haikou (~15min)
18:00-21:00	Welcome banquet, Hai Dao Yu Lin Restaurant (海岛雨林餐厅)

Note: There will be bus service between the workshop place (Law School of Hainan University) and the hotel (New Port Resort Haikou) during the day.

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Day 2: January 20th, 2015 (Tuesday) Place: California Meeting Room, New Port Resort Haikou			
9:00-9:15	Opening ceremony:Address given by Local delegate (Prof. Chongmin WANG)&Beijing delegate (Prof. Lin CHANG)		
9:15-9:45	Keynote speech-1**The Domain of Evidence Law**,Ronald J. ALLEN,Wigmore Professor of Law, Northwestern University, U.S.A.		
9:45-10:15	Keynote speech-2**Fingerprint evidence in the UK: the case of R v. Smith,** Christophe CHAMPOD, Professor, University of Lausanne, Switzerland.		
10:15-10:30	Coffee break		
10:30-10:55	Prof. BaoshengZHANG(01)	China	Forensic Examination at Trials in China
10:55-11:20	Prof. Thomas Y MAN (03)	U.S.A	From De Facto Official Fact Finder to Expert Witness? – Transition of Judicial Appraisal System in China
11:20-11:45	Prof. Marcelo F. AEBI (27)	Switzerland	Explaining trends in homicide in Asia and Western Europe
11:45-12:10	Prof. Alex BIEDERMANN (06)	Switzerland	The role of the subjectivist position in the probabilization of forensic science
12:10-14:00	Lunch buffet & rest time		
14:00-14:25	Prof. Zhong ZHANG (20)	China	Forensic Identification Practice Dilemmas in China
14:25-14:50	Dr. Bangda CHEN (14)	China	On the Transmutation and Experience of Cross-examination of Scientific Evidence in USA
14:50-15:15	Prof. Hongqi WU (35)	China	Expert Advisor in Criminal Proceedings: Institutional Reform and Empirical Observation
15:15-15:30	Coffee break		
15:30-15:55	Dr. Line GUEISSAZ (05)	Switzerland	The potential of chemical analysis of tire traces in traffic accidents investigation
15:55-16:20	Dr. Liang MENG (33)	China	Ultrasound-assisted low-density solvent dispersive liquid–liquid extraction for the determination of amphetamines in biological samples with gas chromatography-mass spectrometry
16:20-16:45	Prof. Hongxia HAO (12)	China	The Study on Detection of TNT by Surface Plasmon Resonance Based on Molecularly Imprinted Polymer
16:45-17:10	Dr. Natacha Gentile (E01)	Switzerland	The potential of analysis of illicit drugs

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Day 3: January 21st, 2015 (Wednesday) Place: California Meeting Room, New Port Resort Haikou			
9:00-9:25	Prof. Huapeng WANG (34)	China	Forensic Automatic Speaker Recognition Based on likelihood ratio using Acoustic-phonetic Features Measured Automatically
9:25-9:50	Dr. DurdicaHAZARD (28)	Switzerland	The relevant physical trace within the criminal investigation
9:50-10:15	Prof. Dong ZHAO (21)	China	Molecular pathology of hypoxia and ischemia in death investigation
10:15-10:30	Coffee break		
10:30-10:55	Dr. Shiquan LIU (09)	China	Document and understand the process of fingerprint identification in China
10:55-11:20	Dr. NatachaGENTILE (13)	Switzerland	The analysis of black powders by EA-IRMS contribution of the isotopic information to the investigation of explosives
11:20-11:45	Prof. Yuanfeng WANG (24)	China	Problems in Paint Evidence Examination Using FTIR in Traffic Accident Cases in China
11:45-12:10	Dr. Quentin MILLIET (10)	Switzerland	Integration of trace images in 3D crime scene reconstruction
12:00-14:00	Lunch buffet & rest time		
14:00-14:25	Mr. Bernard ROBERTSON (38)	New Zealand	Complexity and Refinement of Hypotheses
14:25-14:50	Mr. Michael SCHNEGG (29)	Switzerland	Fibres-Transfer Study on Knife Blades during Stabbing Assaults
14:50-15:15	Mr. EmanueleSIRONI (30)	Switzerland	Bayesian networks for the age classification of living
15:15-15:30	Coffee break		
15:30-15:55	Dr. Zhuhao WANG (04)	China	An Alternative to the Adversarial -Studies on Challenges of Court-Appointed Experts
15:55-16:20	Mr. Xuefeng XU (08)	China	Thinking about the evidence ability of the scene fingerprint evidence and the probative force
16:20-16:45	Prof. Yanling WANG (16)	China	Review and Application of the Handwriting Expert Conclusion in Civil Litigation
16:45-17:10	Ms. Jing WANG (36)	China	Research on several inspection methods about the sequence of copying files and sealing
17:00-17:30	Group photo Address given by Swiss delegate (Prof. Christophe CHAMPOD) & Chinese delegate (Prof. Baosheng ZHANG)		

Session chairpersons:

	Session	Chairperson
Day 2	10:30-12:10	Prof. Ronald J. ALLEN
	14:00-15:15	Prof. Yunlong MAN
	15:30-17:10	Prof. Christophe CHAMPOD
Day 3	9:00-10:15	Mr. Bernard ROBERTSON
	10:30-12:10	Mr. Bernard ROBERTSON
	14:00-15:15	Prof. Yaping LUO
	15:30-17:10	Prof. Yaping LUO

Hotel website:

http://www.howardjohnson-haikou.com/index.html (Chinese)
http://resortnewporthaikou.hojochina.com/haikou_home_en.html (English)

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Contact Information of Participants

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Baosheng Zhang, PhD, Professor

Prof. Zhang is a vice president of CUPL and a director of the Cooperation Center on Modernization and Civilization of the Judicial System. He is one of the leading professors in the field of evidence law and forensic science in China and serves as a director of the Key Laboratory of Evidence Science (CUPL), Ministry of Education, China. He is a law professor at CUPL and lectures both there and at the China-EU School of Law (CESL). He is also a guest professor at Ren Min University of China and Southwest University, as well as a guest research fellow at the University of New South Wales, Australia.

Prof. Zhang is a council member of China Law Society, a standing council member of the China Association for Legal Education, and a member of the International Association of Procedural Law.

Thomas Yunlong Man, Professor from Practice

Thomas Yunlong Man is Professor from Practice of Peking University School of Transnational Law. He holds a Ph.D. in U.S. constitutional history from The Johns Hopkins University and a J.D. from Indiana University Maurer School of Law, Bloomington (IUMSL). He joined STL in 2014 after 17 years of law prac ice in cross-border mergers & acquisitions and corporate transactions with a number of leading international law firms in Chicago, Shanghai and Beijing, including as a partner with Baker & McKenzie, Orrick, Herrington & Sutcliffe, Hogan Lovells and Morrison &Foerster. During his law practice, he participated and led numerous cross-border transactions, including several projects that were named "Deal of the Year" in the China market by leading law publications (e.g., Texas Instruments investment in Chengdu, 2010, by China Business Law Journal, and Walwart investment in Yihaodian, 2012, by China Law & Practice). He was listed as a "Leading Lawyer" in the Mergers & Acquisition and Project Finance categories by International Financial Law Review in 2011. Prior to law practice, Professor Man taught in the History Department of Peking University and was a visiting fellow at the Harvard-Yenching Institute.

While practicing in Beijing, Professor Man was an adjunct professor at China University of Politics and Law (CUPL). He is a member of the Board of Directors of CUPL-ZhongGuanCun Hi-Tech Park Legal Service Company and continues to serve as one of the two foreign legal advisors on the committee of the Institute of Evidence Law and Forensic Science, CUPL, commissioned by the Supreme People's Court to draft the uniform rules of evidence for the People's Courts. He also is co-director of the Academy for the Study of Chinese Law and Comparative Judicial Systems at IUMSL, a research program jointly sponsored by CUPL and IUSML, and a contributing editor of CCH China Business Law Guide.

Professor Man's teaching and research areas include evidence law, constitutional law and comparative judicial process, dual language contract drafting and interpretation, and anti-bribery and ethics in international business transactions. He is a recipient of a grant from the "2011 Plan" of the PRC national government for his research in forensic examination and comparative judicial systems.

Courses Taught

- Evidence Law
- Bilingual Contracts
- Corporate Compliance

Education

- Ph.D., The Johns Hopkins University
- J.D., Indiana University School of Law, Bloomington
- M.A., Peking University

Contact

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Zhuhao WANG, Assistant Professor of Law

Zhuhao Wang is Assistant Professor of Lawat Institute of Evidence Law and Forensic Science, China University of Political Science and Law ("CUPL"), a member of the "2011 Plan" of the PRC national government – Collaborative Innovation Center of Judicial Civilization ("CICJC") and a member of the "111 Plan" of the PRC national government –Base for Evidence Science Innovation and Talent Recruitment ("BESITR").He received J.D. from Indiana University Bloomington – Maurer School of Law, and L.L.M. from University of Pennsylvania Law School. He joined CUPLin December 2012, after two years of law practice in cross-border mergers & acquisitions and corporate transactions with Locke Lord LLP in Dallas, United States.

While teaching at CUPL, Professor Wangserves as Executive Associate Director of the International Association of Evidence Science and is an Executive Committee Member of the 5th International Conference on Evidence Law and Forensic Science (Adelaide, Australia, July 20-23, 2015). He also serves asExecutive Director of International Cooperation for CICJCand is an editor of *Evidence Science* – aleading Chinese law journal focusing on studies ofevidence law and forensic science.

Professor Wang's teaching and research areas include evidence law, procedural law,and international business transactions. He is a recipient of multiple grants from the PRC national government, including a grant from the "2011 Plan" – CICJC and a grant from the PRC Ministry of Education for his teaching and research.

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Line GUEISSAZ, PhD

Line Gueissaz, Ph.D, has a Master' s degree in Forensic Science from the University of Lausanneand a Master' s degree in statistics from the University of Neuchâtel, in Switzerland. She obtainedher PhD in Forensic Science from the University of Lausanne in 2013. During her PhD research, she developed and optimized a procedure for the chemical analysis of tire traces. This led to the proposition of a rigorous assessment method of this kind of trace. The findings of this research were recently (2013) published in the journal *Forensic Science International*.

She worksas an academic researcher and lecturer at the School of Criminal Justice, University of Lausanne. This last task includes theoretical and practical teaching, as well as management of teaching assistants for the training module combining multiple types of traces in casework scenarios (e.g. drugs, fire debris analysis, microtraces and documents).

She also works as a practicing forensic scientist at the School of Criminal Justice, in the trace evidence (microtraces) section. This field mainly focuses on paint, glass, fibres and rubber traces. She regularly carries out proficiency tests,as well as caseworks for the legal system.

Alex BIEDERMANN, PhD

Alex BIEDERMANN graduated from the University of Lausanne (UNIL) in 2002 (studies in forensic science). He then worked (until 2010) as a forensic scientist within the Federal Department of Justice and Police in Berne (Switzerland), with a continuous collaboration in research, teaching and casework with the School of Criminal Justice of UNIL. His PhD studies (2002-2007) at UNIL focused on graphical models and probabilistic inference for evaluating scientific evidence in forensic science. Since then, he pursued several postdoctoral research projects with a statistician at the University Ca' Foscari of Veniceand a philosopher of science at the IUAV University of Venice, jointly supported by the Swiss NationalScience Foundation (SNSF) and the Italian National Research Council. Since 2010, Alex Biedermann works as a Senior Lecturer at UNIL.

Thecurrent research of Alex Biedermann concentrates on graphical modelling for evidential reasoning and decision making in forensic science. It is multidisciplinary and involves forensic science, law and various topics in probability and decision theory.

LIU Shi-quan, PhD student

Shiquan LIU has a BSc in forensic science from Liaoning Police College and MSc from China Criminal Police University. He is a PHD candidate in procedure law from Chinese People's Public Security University on the study of fingerprint identification filed.

He is a Crime Scene Investigator at Jiangsu Police Bureau for 7 years and in charge of crime scene investigation, fingerprint identification, footprint and tool mark identification. His research activities aimed at crime scene investigation and interpretative problems involving pattern evidence.

Hongxia Hao, PhD, Associate Professor

Hongxia Hao has a BSc in chemistry from Inner Mongolia Normal University. She received MSc and PhD in medicine and toxicology analysis from the Chinese People's Public Security University.

She currently is an assistant professor at the Key Laboratory of Evidence Science, China University of Political Science and Law (CUPL). She is also in charge of Forensic Science Instrument Research Center, developing the technologies about on-the-spot quick detection on drug and explosives, such as surface plasmon resonance sensor, molecular imprinted polymer sensor, immunoassay and biosensor.

Natacha GENTILE, PhD

Natacha GENTILE graduated in forensic science and has a strong background on the treatment and exploitation of traces. She obtained a PhD in forensic science, working on the contribution of isotope ratio mass spectrometry to the investigation of homemade explosives. Her research was especially focused on ammonium nitrate fertilisers and black powders.

In the University of Lausanne, she taught students in the fields on fingerprints, fire investigation and illicit drug analysis, and participated at the same time to expertises in fire investigations. She also worked in the technical and scientific service of the police in Jura (Switzerland) for several years. She is currently working at the School of Criminal Justice (University of Lausanne) on illicit drugs caseworks, bringing her expertise on the analysis and profiling of illicit drugs.

Bangda CHEN, PhD

Bangda CHEN has LLB in Criminal Law & Civil Law and LLM in Criminal Procedure Law from the East China University of Political Science and Law. He got a PhD in Criminal Procedure Law from the Law School of Sichuan University. He carried out a post-doc research in Criminal Procedure Law in the East China University of Political Science and Law (ECUPL).

He is actually a post-doctoral research fellow and research assistant professor at the Institute of Sciences from the East China University of Political Science and Law (ECUPL). His research activities cover the criminal procedure law and the legal system of forensic appraisals.

Yanling WANG, Professor

Yanlingwang has aBA in Chinese linguistics and literature from Bohai University and MSc in the history of Chinese characters from Jinlin University.She is actually an associate Professor at the Key Laboratory of the Questioned DocumentofMinistry of Public Security from the National Police University of China (NPUC). There are more than 300 documents to be examined every year. Her research activities coverquestioned document examination, including all kinds of normal and abnormal handwriting examination, the analysis of handwriting and speech, printed documentexamination and the writing timing.Meanwhileshe participates in the forensicscience identification involving questioned documentas well.

She studied English in the People ' s Public SecurityUniversityof China, passed the examination of PETS 5(Public English Test 5)and got the qualification to Australia as a visiting scholar. In March 2013, she took part in the international conference in Serbia. She gave a lecture on the topic of "the study on the characteristics of handwritings on different pads" In English.

Zhong ZHANG, Associate Professor

Zhong ZHANG associate professor of law; associate dean of the institute of evidence science of the China University of Political Science and Law (CUPL); director of the Institute of Evidence Law; master tutor; doctor of law; post doctorate in sociology; visiting scholar of law school of the Northwestern University; executive committee of the International Association of Evidence Science; the New Century Talents of the Ministry of Education in 2012; the main research field is criminal procedure and evidence law.

Dong ZHAO, PhD, Professor

DongZHAO has a BSc in medicine and MSc in forensic medicine from the China MedicalUniversity. He got a PhD in legal medicine from the Osaka City University (Japan) on theapplication of mRNA quantification for diagnosis of the cause of death in medico-legal autopsy. He carried out post-doc researches in the Albany Medical College andin the National Center for Forensic Science at the University of Central Florida in USA, where he demonstrated the novel regulation pathway of transcription factor KLF5 ubiquitinated by an E3 ligase FBW7, as well as he explored new methods of nucleic acid separation and extraction from low-copy samples and forensic applications of tissue-specific RNA quantification in body fluid identification.He is now a Professor at the Key Laboratory of Evidence Science from the China University ofPolitical Science and Law (CUPL).

Christophe CHAMPOD, PhD, Professor

Christophe Champod received his M.Sc. and Ph.D. (summa cum laude) both in Forensic Science, from the University of Lausanne, in 1990 and 1995 respectively. Remained in academia until holding the position of assistant professor in forensic science. From 1999 to 2003, he led the Interpretation Research Group of the Forensic Science Service (UK), before taking a full professorship position at the School of Criminal Sciences (ESC) of the University of Lausanne. He is in charge of education and research on identification methods and maintains an activity as an expert witness in these areas. His research is devoted to the statistical evaluation of forensic identification techniques. The value of fingerprint evidence is at the core of his interests.

Yuanfeng WANG, PhD, Associate Professor

Yuanfeng WANG has a BSc in forensic science and MSc in analytical chemistry from the China Criminal Police University. She got a PhD in procedure law from the Chinese People' s Public Security University on the application of ⅡB-ⅥA quantum dots and TiO_2 nanoparticles for latent fingermark development. She carried out a post-doc research in collaboration with Professor Christophe Champod at the University of Lausanne (UNIL, Switzerland) on the application of fluorescent small particle reagents based on dye-doped hydrophobic silica nanoparticles for latent fingermark detection.

She is actually an associate Professor at the Key Laboratory of Evidence Science from the China University of Political Science and Law (CUPL). She is in charge of the microtraces and chemical criminalistics department including the analysis of forensic samples like paint, plastics and fibres. Meanwhile, she participates in the forensic toxicological analysis as well. Her research activities cover a broad spectrum of disciplines aimed at elucidating analytical and interpretative problems involving trace evidence and toxicological evidence.

Marcelo F. AEBI, PhD, Professor

Marcelo F. Aebi, Ph.D., is full professor of criminology and vice-director of the School of Criminal Sciences at the University of Lausanne, Switzerland. He is also a part-time visiting professor at the Autonomous University of Barcelona, Spain. His main research topics include comparative criminology, prisons, methodology, juvenile delinquency, drugs and crime, and victimization and self-reported delinquency studies. He is author or co-author of more than one hundred scientific publications published in English, French, Spanish, Catalan, Italian, Macedonian, and German. After his studies at the universities of Buenos Aires, Argentina (M.A. in law) and Lausanne (M.A.S. and Ph.D. in criminology), he was a visiting fellow at the Rutgers School of Criminal Justice (New Jersey, United States of America) and at the Max Planck Institute for Foreign and International Criminal Law (Freiburg, Germany), as well as vice-director and professor of criminology at the Andalusian Institute of Criminology in the University of Seville (Spain). Marcelo F. Aebi is a consultant expert of the Council of Europe, a member of the European Sourcebook Group, and the Executive Secretary of the European Society of Criminology. He is also member of the Scientific Advisory Boards of the International Center for the Prevention of Crime (ICPC), the Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), and the European Institute for Crime Prevention and Control (HEUNI).

Michaël SCHNEGG, Teaching Assistant, PhD student

Michaël SCHNEGG obtained a BSc in Forensic sciencein 2011 and a MSc in Forensic science – subject area Identification – from the School of Criminal Justice of the University of Lausanne (UNIL, Switzerland) in 2013. He is actually a PhD student at the School of Criminal Justice (UNIL, Switzerland) where he is associated with the *Microtraces* and the *Forensic Imaging* departments. He is in charge of several practical works like expertizes and analyses of forensic samples, notably fibres and other microtraces(paint, glass, plastic …).

He performed a study in the domain of the coating systems of motorcyclist helmets during his master thesis. His current PhD research is dedicated to the relevance of fibres recovered in domestic homicides involving familiar protagonists (spouse, husband, partners, children…). The principal aim of the research is to investigate the repartition of fibres in order to assist in the interpretation of the evidence.

Huapeng WANG, PhD, Associate Professor

Huapeng WANG has BSc and MSc in Signal and Information processing from the Northwestern Poly technical University. He got a PhD in Signal and Information processing from the University of Chinese Academy of Sciences on the application of forensic speaker recognition.

He is actually an associate Professor at National Police University of China. He is in charge of the Audio-visual material examination department including the analysis of forensic samples like sounds, surveillance video. His research activities cover forensic speaker recogniton, evidence quantitative evaluation and interpretation.

Hongqi WU, PhD, Associate Professor

Hongqi WU received his Ph.D. from China University of Political Science (CUPL) and Law in 2010 and has been as a visiting scholar from 2009-2010 in Law School of Northwestern University. He began his research career in Law School of Xiamen University (2010-2013).Now he is an Associate Professor of Institute of Evidence Law & Forensic Science, CUPL. His research area covers evidence law, criminal procedure and legal ethics. In recent years, his major interest has been on empirical research of exclusion rule of evidence and expert evidence. He has published The Logic of Transformation: Circumstance and Construction of Evidence Law and several papers on evidence law.

Ronald J. Allen

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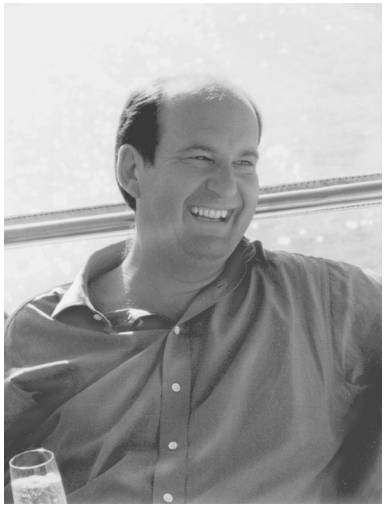
Professor Allen is the John Henry Wigmore Professor of Law at Northwestern University, in Chicago, IL. He did his undergraduate work in mathematics at Marshall University and studied law at the University of Michigan. He is an internationally recognized expert in the fields of evidence, criminal procedure, and constitutional law. He has published seven books and over 100 articles in major law reviews. He has been quoted in national news outlets hundreds of times, and appears regularly on national broadcast media on matters ranging from constitutional law to criminal justice. The New York Times referred to him as one of nation's leading experts on constitutional law and criminal procedure. He has worked with various groups in China to help formulate proposals for legal reform, and he was recently retained by the Tanzanian Government to assist in the reform of their evidence law.

Professor Allen began his career at the State University of New York, and has held professorships at the University of Iowa and Duke University prior to coming to Northwestern. He has lectured on his research at universities across the world, among them Columbia University, Cornell University, University of Chicago, University of Virginia, University of Pennsylvania, University of Michigan, Duke University, Oxford University, University of London, Leiden University, the Royal Netherlands Academy of Arts and Sciences, University of Edinburgh, University of British Columbia, the University of Paris (Sorbonne), Parma University, Turin University, Pavia University, University of Adelaide, Australia, and Victoria University of Wellington, New Zealand, and UNAM, Mexico City. In 1991, he was the University Distinguished Visiting Scholar, at the University of Adelaide, South Australia. One of his books has been translated into Chinese by the Ministry of Education of the People's Republic of China, and he has been invited to China for a series of lectures each year from 2004 to 2010. He was recently appointed the inaugural Fellow of the Procedural Law Research Center of the China University of Political Science and Law, Beijing, and Chair of the Board of Advisors of the new Evidence and Forensic Science Institute in Beijing. In April of 2007, the Ministry of Education of the People's Republic of China announced that he had been designated as a Yangtze River Scholar, only the fourth American and first law professor (Chinese or foreign) to be so honored. He has also been invited to lecture by the governments of Mexico, Spain, and Trinidad/Tobago. For the last ten years, his research has focused on the nature of juridical proof.

He is a member of the American Law Institute, has chaired the Evidence Section of the Association of American Law Schools, and was Vice-chair of the Rules of Procedure and Evidence Committee of the American Bar Association's Criminal Justice Section. He has served as a Commissioner of the Illinois Supreme Court, assigned to the Attorney Registration and Disciplinary Commission. He is presently on the Boards of the Constitutional Rights Foundation-Chicago, and the Yeager Society of Scholars of Marshall University. He has served on various boards and committees of civic and cultural institutions in Chicago, and presently is a member of the Board of the Joffrey Ballet.

Bernard Robertson



Bernard Robertson graduated in law from the University of Oxford and subsequently qualified as a barrister at the Inns of Court School of Law and obtained a LLM from the London School of Economics. After service in the Royal Navy he served in the (London) Metropolitan Police for ten years, five years of which was in the rank of Inspector after graduating from the National Police Staff College.

Mr. Robertson then moved to New Zealand where he taught law at Victoria University of Wellington and at Massey University. In collaboration with Professor Tony Vignaux, Bernard wrote *Interpreting Evidence: evaluating forensic science in the Courtroom* (John Wiley and Co (UK) (1995)) as well as publishing numerous journal articles on the application of Bayesian analysis to legal evidential issues. They are now completing a second edition together with Dr Charles Berger of the Netherlands.

For the last 15 years, Mr. Robertson has been Editor of The New Zealand Law Journal and the New Zealand Law Reports but having now retired from those positions, is able once more to devote more attention to the application of Bayesian analysis in law generally and in forensic science in particular.

Lin CHANG, Professor

Prof. CHANG is the director of the Institute of Evidence Law and Forensic Science at CUPL. He teaches general knowledge of forensic science as well as forensic medicine. As an experienced expert in the field of forensic pathology and forensic clinical medicine, Prof. CHANG plays an important role on the development of this discipline. He is the Co-editor of EVIDENCE SCIENCE. He is the president of Beijing Association of Forensic Science. He is the Deputy Secretary-General of Chinese Forensic Medicine Association. He is the Deputy Chairman of Forensic Medicine Branch of National Standardization Technical Committees. Prof. CHANG is also the expert member of Chinese Medical Association and Beijing Medical Association.

Prof. CHANG has led several research projects, such as the "Law issues among Forensic examination of Medical Tangle", the "Research on Expert Opinion System" and the "Study on the Model of Influence Factor on Traffic Accident Injuries".

Yaping LUO, PhD, Professor

Yaping LUO graduated from the China Criminal Police University in1986 with a BSc in forensic science. She got a MSc in Criminal Procedure law in 2001 and PhD in forensic science in 2009 from the Chinese People' s Public Security University.

She joined in the Chinese People' s Public Security University in 1986. From 1986 to 2002, She was a lecturer / an associate professor in the criminal investigation department. From 2002 until now, she works as a professor in the forensic science department. Her research activity focused on the development of forensic techniques based on the impression evidence. In recent years, she has maintained a strong research interest in the fingerprint field.

The Role of Forensic Examination at Trials in China

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ABSTRACT: Expertise gains increasing acceptance and importance at trials in China. Currently, the forensic examination quality management system of China has been preliminarily established. There are problems, however, for example, laws and regulations related with forensic examination are not comprehensive, forensic institutes pursue their own economic profits excessively and judges sometime have undue blind faith in scientific evidence in fact-finding. These are hindering forensic examination from being put into full play duly. In 2005, the Decision of the Standing Committee of the National People's Congress on the Administration of Forensic Examination strengthened the neutrality of forensic institutes. The Criminal Procedure Law and the Civil Procedure Law revised in 2012 initially set up the expert assistant system, which is expected to break the superstition on the scientific evidence and solve pertinent problems. We ought to focus on the following aspects: first, a unified set of rules on forensic examination is in particular need. Second, judges need to strengthen their own ability of reviewing scientific evidence and determining its reliability. Meanwhile, we should promote the fundamental legal education reform actively to remedy the current challenges posed by the insufficiency of legal talent in forensic science. Last but not least, on the basis of existing system, the expert assistant system must be further improved in order to help judges and litigants identify and use expertise.

KEYWORDS: Forensic Examination; Expertise; Expert Assistant; Scientific evidence; Fact Finding

From De Facto Official Fact Finder to Expert Witness?
– Transition of Forensic Examination System in China

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ABSTRACT: Forensic examination plays an important role in China's judicial system, especially in fact-finding process of both civil and criminal proceedings. Since 2005, this system has experienced gradual, yet significant changes. This paper seeks to examine the major themes of these changes in the context of the continued conceptual reformulation and structural realignment of civil and criminal procedures and the ongoing effort to codify evidence law with transforming impact on China's judicial system and culture. Emphasis will be given to the transition of the forensic examination system from an officially (both administrative and judicial) administered fact finding mechanism with powerful impact on the courts' truth-seeking activities to, at least partially, an expert witness system with significant participation and control by the parties' to judicial proceedings. A convergence of influence from both the continental inquisitorial tradition and the common law adversarial structure appears to have strongly informed the process and direction of the Chinese forensic examination reform. This paper attempts to explain the reasons for this convergence of influence, identify the trend and direction of this development, and provide observations and suggestions for further improvement of the forensic examination system in several key aspects with particular reference to the legal principles and judicial practices under the Federal Rules of Evidence of the United States.

KEYWORDS: Forensic examination; Expert Witness; Fact Finding

An Alternative to the Adversarial – Studies on Challenges of Court-Appointed Experts

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ABSTRACT: Nowadays, experts have become a mainstay of modern litigation, although criticisms suggest that the problems of how to fit expert knowledge comfortably into the method of adversarial fact-finding are numerous, significant, and without simple solutions. Concerns about partisanship and lack of scientific competence by adjudicators to evaluate contradictory expert testimony have been widely recognized in the traditional use of party-called expert witnesses. While such concerns cannot be wholly ameliorated, there may be alternative mechanisms that can help. One solution would be to call for the use of neutral court-appointed experts, in order to create a nonpartisan source of expert knowledge.

A system of neutral court-appointed experts is an advisory tribunal to the court that could deliver "those general truths, applicable to the issue, which they may treat as final and decisive". Since last century, many countries, including China, have been putting in tremendous legislative and institutional efforts in this direction. However, no matter in which country, despite a preliminary mechanism of court-appointed experts has been established on the legislation level, choice of appointing neutral experts still seems to be a rare option for trial judges to consider and exercise. Even in United States, a country with a relatively matured court-appointed expert mechanism, a recent survey indicates that only about 20 percent of federal district court judges had ever appointed an expert. And within such 20 percent, half of those had done so only once. An obvious question would be: why are neutral experts not used more frequently at trial?

This paper will focus on challenges that current court-appointed expert mechanism faces. First part will discuss the incentives to make greater use of court-appointed experts and to what extent such mechanism would solve the numerous difficulties with the traditional methods for using party-called expert witnesses. Second part will further explore and analyze procedural as well as ethical obstacles that a typical neutral expert system nowadays encounters in practice. Then studies will be shifted on when and how to use neutral experts in ideal situation(s). Last part of this paper will make a comprehensive, in-depth evaluation of court-appointed expert mechanism.

The potential of chemical analysis of tire traces in traffic accidents investigation

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ABSTRACT: The aim of the forensic investigation of traffic accidents is to help establishing the nature and/or the cause of the incident. There are several reasons for this purpose, for example to determine the legal responsibilities of each person involved or to provide families, with a reconstruction of the events, why their relatives were injured or killed.

Forensic investigators reconstruct accidents by exploiting different traces found on the scene. Tire traces have a strong potential as several information can be extracted from them to help understanding and reconstructing the sequence of events. For example, the trajectories can be estimated from the observed skid marks on the road. However, one of the first questions of interest is to know which vehicle is at the source of a particular tire trace. To help answering this question, each tire trace can be compared to the tires of the vehicles suspected to be involved in the accident. Morphological features can be used to compare a tire trace with a suspected tire but the potential of such characteristics is limited in terms of discrimination for several reasons (e.g. the improvement of the car braking system). Nowadays, tire traces resulting from a braking or skidding are more often in the form of an agglomeration of small rubber abrasions. Thus, chemical analysis is necessary for comparison purposes.

The present research describes a methodology for the comparison of chemical profiles of tire traces and tire tread samples obtained by pyrolysis-GC/MS (Py-GC/MS). Chemical profiles were represented by relative abundances of eighty-six compounds. The variability of the tread within and between twelve tires was assessed. Considering the level of source as “manufacturer and model” the intra variability was found weaker than the inter variability, leading to the complete discrimination of the twelve tires of the sample set. Braking tests were carried out on a racetrack in order to produce tire traces whose origin was known. The results obtained with a supervised classification method showed that more than 94% of the replicates of the traces could be correctly assigned to the class membership (i.e. manufacturer and model) of the tire at their origin. These results support that the chemical profile of one trace generally does not differ from the chemical profile of the tire atits origin but differs from the other chemical profiles of the sample set.

KEYWORDS: Forensic, Tire, Tread, Rubber, Tire trace, Pyrolysis, Chemical profile, Chemometrics

The role of the subjectivist position in the probabilization of forensic science

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ABSTRACT: This paper is concerned with the contribution of forensic science to the legal process by helping reduce uncertainty. Although it is now widely accepted that uncertainty should be handled by probability, because it is a safeguard against incoherent proceedings, there remain diverging and conflicting views on how proba- bility ought to be interpreted. This is exemplified by proposals in scientific literature that call for procedures of probability computation that are referred to as 'objective', suggesting that scientists ought to use them in their reporting to recipients of expert information. I find such proposals are objectionable. They need to be viewed cautiously essentially because ensuing probabilistic statements can be perceived as making forensic science prescriptive. A motivating example from the context of forensic DNA analysis will be chosen to illustrate this. As a main point, it shall be argued that such constraining suggestions can be avoided by in- terpreting probability as a measure of personal belief, that is, subjective probability. Invoking references to foundational literature from mathematical statistics and philosophy of science, the discussion will explore the consequences of this interdisciplinary viewpoint for the practice of forensic expert reporting. It will be emphasized that – as an operational interpretation of probability – the subjectivist perspective enables forensic science to add value to the legal process, in particular by avoiding inferential impasses to which other interpretations of probability may lead. Moreover, understanding probability from a subjective per- spective can encourage participants in the legal process to take on more responsibility in matters regarding the coherent handling of uncertainty. This would assure more balanced interactions at the interface be- tween science and the law. This, in turn, provides support for ongoing developments that can be called the 'probabilization' of forensic science.

Keywords*:* Subjectiveprobability, Forensicscience, Legalprocess, Uncertainty reduction

CREDIBILITY AND EFFECTIVENESS OF FINGERPRINT EVIDENCE AT CRIME SCENE

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ABSTRACT: To provide guidance to rule making of evidence, discussion on credibility and effectiveness of evidence shall be based on a specific kind of evidence. Fingerprint evidence in criminal cases is characteristic of long service time and large application amount. Therefore, studying the credibility and effectiveness of fingerprint evidence can provide new ways for rule making of evidence. Based on characteristics of fingerprint and attributes of evidence, this paper discussed credibility and effectiveness of fingerprint evidence at crime scenes as well as other related problems, trying to provide classified study methods for different evidences.

【**Key Words**】Fingerprint evidence at crime scene, Credibility and effectiveness

Study on accuracy of judgments by Chinese fingerprint examiners

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ABSTRACT: The interpretation of fingerprint evidence depends on the judgments of fingerprint examiners. This study assessed the accuracy of different judgments made by fingerprint examiners in ACE process. Each examiner was given 5 marks for analysis, comparison and evaluation. We compared these judgments with the ground true and used PiAnoS platform to evaluate how Chinese fingerprint examiners make judgment during the identification process. The results showed that different examiners demonstrated different accuracy of judgments.

Key words: Forensic science, Accuracy, Fingerprint identification, Judgment

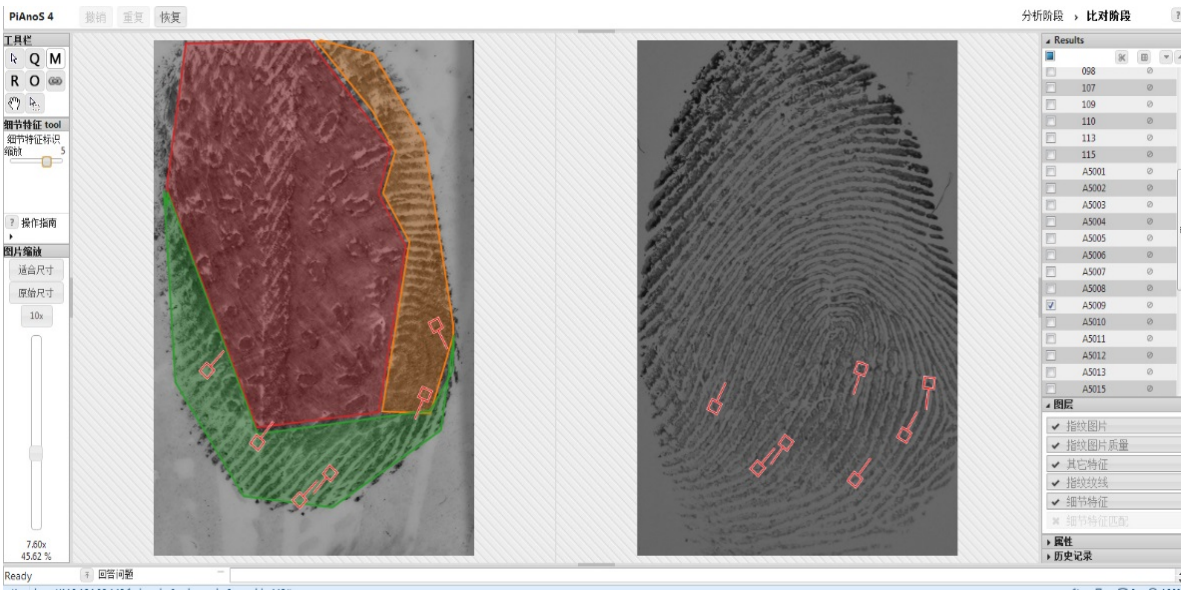

Figure 1: Annotations in comparison phase

Integration oftrace images in 3D crime scene reconstruction

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（1．University of Lausanne, School of Criminal Justice, Batochime, CH-1015 Lausanne – Dorigny, Switzerland）

ABSTRACT: Forensic image analysis has greatly developed with the proliferation of photography and video recording devices in each and everyone's pocket. Trace images of serious incidents are increasingly captured by first responders, witnesses or surveillance systems. Image perception is exposed with a special emphasis on the influence of the field of view on observation. In response to the pitfalls of the mental eye, a way to systematise the integration of images as traces in 3D crime scene reconstruction is proposed. The systematic approach is based on the application of photogrammetric principles to slightly modify the usual photographic documentation as well as on the early collection and review of available trace images. The integration of images as traces provides valuable contributions to contextualise what happened on a crime scene based on the information that can be obtained from images. In a wider perspective, the systematic analysis of images fosters the rule of law by increasing the use of forensic evidence to complement witness statements in the criminal justice system.

KEYWORDS: Image perception, Interpretation, Photogrammetry, Witness images

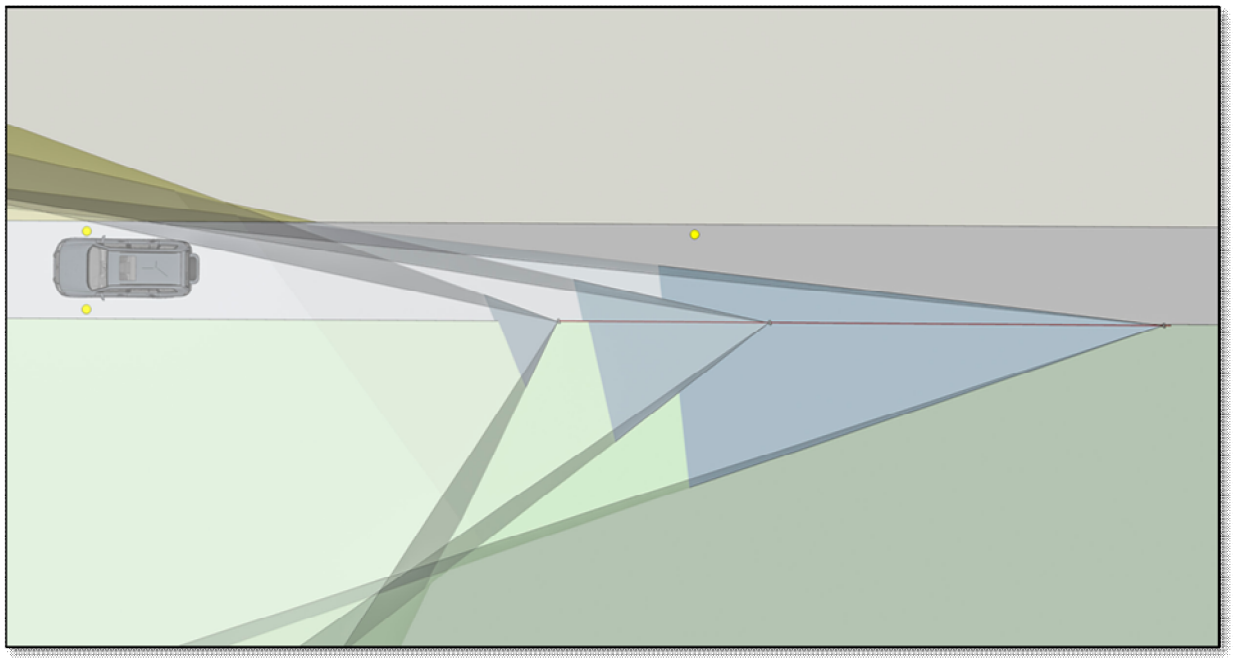

Figure 1: Top view of the long Pajero with 5 doors, which was recorded by images from the cameras of Figures 1, 2 and 3; the cameras' fields of views are indicated (from left to right the 24, 43 and 85 mm focal lengths).

Detection of TNT by Surface Plasmon Resonance based on Molecularly Imprinted Polymers

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(1 Key Laboratory of Evidence Science, China University of Political Science and Law, Ministry of Education, Beijing 100088, China; 2 Institute of Forensic Science, Ministry of Public Security, Beijing 100038, China; 3 Beijing Mentougou District Court, Beijing 102300, China)

ABSTRACT: TNT (2, 4, 6 - trinitrotoluene) is a commonly used explosive. It is not only a threat to public safety but also causes environmental pollution affecting human health. However, at this stage of TNT detection, technology cannot meet the demands of the current situation. A new method described in this paper is devoted to the study of fast and quantitative detection of TNT. It combines the molecular imprinting technique (MIT) with surface plasmon resonance (SPR) technology for high sensitivity. In this study, a molecularly imprinted polymer film for detection of TNT was synthesized by heat in acetonitrile at 60℃, using TNT the imprinting molecule and azobisisbutyronitrile (AIBN) as initiator. In the present work, the influence factors for elution efficiency, such as raw material ratios, fore-reaction time, reaction time, etc... . The results show that the polymers have the highest elution efficiency when raw material mole ratios(n(TNT): n (methacrylic acid): n (EGDMA)) were 1:4:8; the molecularly imprinted polymer (MIP) sensor could detect a TNT concentration as low as 1×10^{-10} M. Compared to the blank polymer with the same chemical composition, the imprinted polymer had higher binding efficiency and higher selectivity.

KEYWORDS: TNT; Molecularly imprinted polymer (MIP), Surface plasmon resonance(SPR)

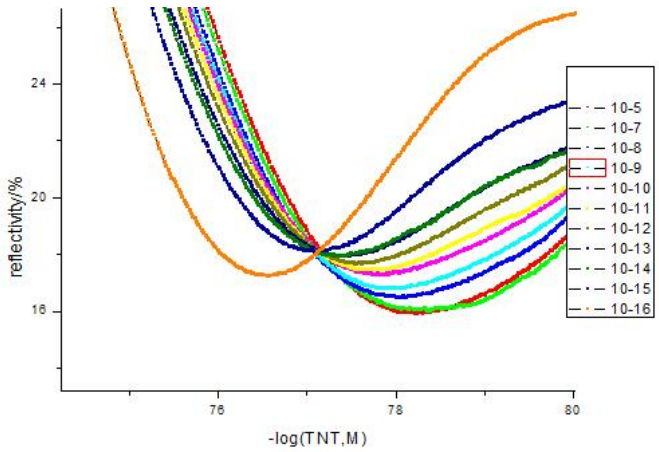

Figure 1. Details of spectral minima from Figure

Differentiation of black powders by elemental analysis isotope ratio mass spectrometry (EA-IRMS)

Natacha GENTILE[1], Rolf T. W. SIEGWOLF[2], Olivier DELEMONT[1]

(1 Faculty of Law, Criminal Justice and Public Administration, School of Forensic Science, Batochime, Lausanne University, 1015 Lausanne, Switzerland .2 Laboratory of Atmospheric Chemistry, Paul Scherrer Institut, 5232 Villigen, Switzerland.)

ABSTRACT: The routine analytical techniques used in the investigations of explosives allow determining the chemical nature of the explosive charge. However, the true contribution of such analytical data in the forensic investigation of explosives is often limited, as further discrimination between specimens is not possible.

For several years now, isotope ratio mass spectrometry (IRMS) has been the object of numerous publications in various fields of forensic science, which have reported on its remarkable ability to distinguish between samples of the same chemical nature.

Through the isotopic study of black powders, this research aims at better understanding and evaluating the contribution of the nature of IRMS results to the investigation of pre-blast explosives. Black powders coming from different manufacturers, types, batches and daily productions, were collected and analysed by EA-IRMS (elemental analyser isotope ratio mass spectrometry). The results of analysis were combined to detailed information pertaining to the production of these samples to assess the variability of stable isotopes as well as the value they convey for source inference considerations. Through unsupervised and supervised statistical approaches, the structure of the data set was explored and the performance of the classification models evaluated. The results of these statistical treatments were evaluated in light of the information pertaining to the source structure of the samples.

KEYWORDS: Explosives investigations, Black powder, Explosives, IRMS, Isotope, Multivariate statistical analysis.

On the Transmutation and Guidance of Examination of Scientific Evidence in the USA.

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ABSTRACT: The examination of scientific evidence is an important way to distinguish forensic science from "junk science"; it is also an important basis for judges to determine credibility in scientific evidence. Based on the studies of the USA, we may learn that the examination process of scientific evidence mainly includes the discovery process and the examination of expert witnesses. Some details behind this concept can be summarized as follows: focusing on the discovery of scientific evidence, allowing litigants to consult experts at the disclosure of such scientific evidence, establishing a sound mechanism of cross-examination, introducing reforms to address the doubts of expert witnesses. Empirical studies reflected that the current situation of scientific evidence application in China is not so optimistic. Functions of scientific evidence discovery were neglected, thus dismissing the effectivity of cross-examination in scientific evidence. We should uncover scientific evidence's abilities to make new discoveries, through stipulating the subject, the methodology, the scope and the period of discovery of scientific evidence; performing with neutrality and professionalism in the cross-examination process.

KEYWORDS: Scientific evidence, Cross-examination, Discovery of evidence, Forensic appraisals, Cross-examination of expert witnesses

Review and Application of the Handwriting Expert Conclusion in Civil Litigation

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ABSTRACT: Evidence is the foundation for the realization of judicial justice. As a kind of evidence, handwriting conclusion should be the reference factors that judge reduction. Strengthening research on the conclusion of handwriting identification can guarantee the state judicial organs exercise their power of justice, it is especially important for the realization of socialist democracy and the rule of law. At present, the handwriting expert conclusion is of five kinds: identification, negation, tendency affirmative or negative conclusion, tendency cannot clear conclusion. Conclusion of handwriting identification can be divided into three categories: affirmative conclusion, tendentiousness conclusion, not clear conclusion. In China, in civil cases, affirmative conclusion of handwriting identification is easily accepted by judge, and the tendency of handwriting identification conclusion will not be accepted. In fact, this approach is questionable. Because the handwriting samples exist camouflage, handwriting change big, difficult to determine the nature of the situation, the later collected samples has problem in quantity, comparability, authenticity and the experience of the handwriting expert is different. These problems will make the conclusion of handwriting identification tendency exist. This is a normal phenomenon, but also an inevitable phenomenon. This requires the judge to review the tendency of handwriting identification conclusion. The judge should carefully observe the parties' handwriting in the file of case stage, service and defend stage, trial stage and investigation stage, combined with the identification of the handwriting in cross examination method, the accuracy of orientation of the handwriting expert conclusion shall be assessed, and judge the tendency of the handwriting expert conclusion value. Accordingly, the judge based on the tendency of handwriting identification conclusion judgment of civil cases.

ABSTRACT: Handwriting Expert Conclusion, Civil Litigation, Application

Forensic Identification Practice Dilemmas in China

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ABSTRACT: With the progress of science and technology, more and more cases need to prove facts by high-tech means.[1] According to scholars' statistics of judgments made by the court of some cities, at present, almost all criminal cases involve scientific evidence and identification, and this trend has been enhancing year by year.[2] As scientific evidence has become a new generation of "King of Evidence",[3] scientificity and standardization of forensic identification has attracted more and more attention. With the revision of the *Criminal Procedural Law of the PRC* and the *Civil Procedural Law of the PRC* in 2012, it has entered a new historical stage of litigation system and made significant progress in forensic identification system in China.

Firstly, it has improved types of evidence and changed "expert conclusion" to "expert opinion", which can achieve more accurate positioning of properties of evidence and meet essential characteristics of forensic identification in judicial proceedings.[4] It suggests that an identification result is only the identifier's personal opinion but not the final arbiter conclusion. The change has enhanced judge's role in investigation and verification to the forensic identification results, which means "the end of the era of representation"[5] and a grasp of scientificity of forensic identification.[6]

Secondly, it has standardized the identifier testimony system. If the parties concerned has an objection to the expert conclusion or the court thinks it is necessary for the identifier to appear in court, the identifier shall appear in court to testify. If the identifier refuses to appear in court to testify upon the court's notification, the expert opinion may not be used as the basis for fact. To eliminate identifiers' scruple about testifying, legislation adds an identifier protection system and sets the same

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[1] Mirjan R. Damaska, Evidence Law Adrift, Translated by Li Xuejun, China University of Political Science and Law Press, 2003, p. 200.

[2] Wang Jiancheng, "Empirical Research Report on Criminal Forensic Identification System of China", Peking University Law Journal, 2010, Issue 2.

[3] He Jiahong, "Prospective Study on Science of Evidence Law of China", Legal Daily, September 2, 1999.

[4] Bian Jianlin, Guo Zhiyuan, "Interpreting China's New Criminal Procedural Law and Promoting Development of Forensic Identification System", Chinese Journal of Forensic Sciences, 2012, Issue 3.

[5] Wang Jinxi, "Impact of Revision of Criminal Procedural Law on Forensic Identification Activities", New Developments of Criminal Evidence Law, Law Press China, 2013, p. 99.

[6] Chen Guangzhong, Lv Zehua, "New Developments and New Prospects of Criminal Forensic Identification in China", Chinese Journal of Forensic Sciences, 2012, Issue 2.

specific protection measures as ordinary witnesses.

Thirdly, it has established an expert advisor system. During a court hearing, the parties concerned may request the court to notice a person who has expertise to appear in court to give opinions about the expert opinion given by the identifier or about professional issues. The expert advisor system is considered to be "the only way of correctly adopting expert conclusion",[7] as it changes the situation where the identifier rules the roost in exert opinion and to a large extent compensates for lack of knowledge of the prosecutor and the defender as well as the judicial officers.

Nevertheless, it is undeniable that China's forensic identification system is not perfect, for example, in management system, codes of conduct, technical standards, use of evidence and legal liability. In particular, due to the diversified identification systems and the trend of "privatization" of identification institutions,[8] forensic identification has deviated from the principles of public benefit, neutrality and scientificity,[9] and low-quality expert opinions can be seen in various litigation activities. This has led to multiple-authority and repeated identifications. Therefore, China needs to further develop and improve the forensic identification system.

Grand Justice Shen Deyong, Executive Vice-President of the Supreme People's Court, pointed out that, "In study and improvement of the evidence system, China should consider national conditions and draw lessons to explore an evidence system aligned to national conditions. Also, it should study and actively learn experience from other countries."[10] China's forensic identification system is different from western countries' expert witness system. For improvement of China's forensic identification system, the first consideration is the country's forensic practice. In view of this, the study *Evidence Law Development Index of China* which was conducted in 2013 regards forensic identification as a primary indicator to be inspected, including forensic identification management system, qualification of identification institution and identifier, identification procedure and methodology, right to start identification for the parties concerned, identifier and expert advisor testimony and judge's review and judgment on scientific evidence. From September 2013 on, the study made a four-month survey on cases where court evidence regulations apply at ten courts in China. In addition to questionnaires for 750 respondents, it also involved symposia, interviews, attending trials and collecting written data, to survey implementation of the forensic identification system and explore applicability of expert opinion. This study touched upon implementation of forensic identification especially new situation and new problems in practice, providing a practical foundation for improvement of China's forensic identification system.

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[7] Zhou Shimin, "Establishing New Expert Opinion Review Mechanism: Expert Advisor Cross-Examination System", People's Procuratorial Monthly, 2003, Issue 4.

[8] Chang Lin, "Study on Expert Advisor System for Forensic Identification", China University of Political Science and Law Press, 2012, p. 135.

[9] Zhang Baosheng, Science of Evidence Law (second edition), China University of Political Science and Law Press, 2014, p. 223.

[10] Shen Deyong, "Paying Attention to Roles of Four Parts of Judicial Proof – Obtaining Evidence, Putting To the Proof, Cross-Examination and Authentication", Legal Daily, July 24, 2013.

Molecular pathology of hypoxia and ischemia in death investigation

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ABSTRACT: The present study quantitatively analyzed glucose transporter 1 (GLUT1) and vascular endothelial growth factor (VEGF) mRNAs in the lung and skeletal muscle specimens to assess the applicability in death investigation with regard to molecular pathology of hypoxia and ischemia. Medicolegal cases (n=270) include fatal blunt injury (n=92), sharp instrument injury (n=13), asphyxia (n=21), drowning (n=27), fire fatalities (n=63), hypothermia (n=19), hyperthemia (n=4), acute myocardial infarction (n=12), ischemic heart diseases (n=6), and infectious diseases (n=13). Expression of GLUT1 and VEGF were quantified at mRNA level. Relative mRNA quantification using Taqman real-time PCR assay demonstrated higher expressions of GLUT1 and VEGF in skeletal muscle in fatal traumatic injuries, hypothermia and infectious diseases, while oppositely lower expression of GLUT1 and VEGF in lung for the same deaths. These findings suggest that gene expressions of GLUT1 and VEGF might be useful biological markers in forensic pathology for subacute and delayed deaths.

KEYWORDS: mRNA quantification, VEGF, GLUT1, Cause of death, Forensic medicine

Lessons from fingerprint evidence in the UK: the case of R v. Smith

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ABSTRACT: Fingerprint evidence has been the subject is deeper scrutiny on the last decade. Cases of misidentifications have been reported, extensively investigated (e.g. the Mayfield case or the McKie case) and discussed. The US National Academy of Sciences reported in 2009 upon what was judged as an alarming state of affair in the area of fingerprint identification. In these challenging times, one case involving fingerprint evidence has reached the Court of Appeal of England and Wales: R v. Peter Kenneth Smith[2011] EWCA Crim 1296. The case involves the presentation of multiple experts on behalf of prosecution and defense. The opinions ranged from statements towards the identification of the defendant to statements to his exclusion. The mark under dispute is of very limited quality: a partial impression left in blood by the phalange of a finger. This paper will outline the main issues and recommendations reached by the Court of Appeal and contrast them with the state of scientific research in the area. The Court of Appeal left it to a matter of opinion, whereas it will be argue that we should first assessed the soundness of the scientific discipline when applied to such peculiar marks and not leave it exclusively to a trust-based relationship between the courts and the experts.

Problems in Paint Evidence Examination Using FTIR in Traffic Accident Cases in China

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ABSTRACT: In traffic accident cases, trace evidence plays a very important role in determining contact and finding the suspect cars. Paints are the most common evidence in traffic accident cases. There are many effective ways to examine paints. Among these methods, Fourier Transform Infrared Spectroscopy (FTIR) is the most widely used because of the advantages such as faster qualitative results, less material usage and high analysis accuracy. However, in practice, many problems exist in aspect of data treating, practice procedure, scope of application and conclusion forms. There are sorts of problems in paint evidence analysis using FTIR.

To solve above problems, I start a systematic study on the cases that Fada institute of forensic medicine & science have solved from 2008 to 2013. Based on these practical cases, I try to explore and summarize all the problems that have happened in the process of paint abstracting, paint examining and using as scientific evidence by FTIR. Then I try to figure out some proper solutions to make up for the disadvantages of current paint examination condition using FTIR.

Research shows that scene investigators may make a lot of mistakes in the process of searching and finding paint fragments. They may fail to locate the right collision points and be misled by colors of paints as well. They also sometimes ignore the blank samples and pollutions. Forensic examiners may face up to the fake positive or fake negative results. Using only one particular analytical instrument to do the examination may also produce dozens of problems in the process of paint fragments examination. What's more, lack of paint evidence interpretation may mislead judges about the properties of paint evidence.

Such a research can help optimize and strengthen the application of paint evidence in traffic accident cases in China.

KEYWORDS： Paint evidence; Fourier Transform Infrared Spectroscopy (FTIR); Traffic accident case; evidence interpretation

Explaining trends in homicide in Asia and Western Europe

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ABSTRACT: Recent research shows that, in Western Europe, homicide victimization rates increased from the mid-1960s to the early 1990s, and have been decreasing since then. An analysis of the characteristics of the victims in terms of gender and age does not provide empirical support to the hypothesis of a homicide trend driven by the evolution of victimization of young men in public space. At the same time, lifestyle theory offers an explanation that fits the trends observed (Aebi and Linde, 2014). This presentation compares the trends observed in Western Europe to the ones observed in Asia. Trends during 50 years are available only for a few nations, but data since the 1990s can be found for several countries, including China. The goal is to identify similarities and differences in the trends observed in both regions, and to test whether traditional predictors of homicide –operationalized through different economic and socio-demographic variables– can explain them.

The relevant physical trace within the criminal investigation

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ABSTRACT: A criminal investigation requires to search and to interpret vestiges of a criminal act that happened in the past. The forensic scientists one of the many stakeholders who take part to the information quest within the criminal justice system. She reads the investigation scene in search of physical traces, that should enable her to tell a story of the offence/crime which allegedly occurred.

The challenge of any investigator is to detect and recognise relevant physical traces in order to provide forensic clues for investigation and intelligence purposes that will constitute sound and relevant evidence for the court.

Inspired by this observation, the current article/presentation shows how important it is to define and discuss the relevancy of physical traces from the beginning of the investigation and what might influence the evaluation process. The exchange and management of information between the investigation stakeholders is of importance. Relevancy is clearly a dimension that needs to be understood through the perspectives of law enforcement personnel and forensic scientists, and thus with the aim to strengthen the investigative phase and ultimately the overall-judicial process.

Fibres: Transfer Study on Knife Blades during Stabbing Assaults

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ABSTRACT: In Switzerland, knives are the second most frequent weapon encountered in homicide cases, just after firearms. In domestic homicides, sharp weapons are the most common items used to kill the victim. Besides homicides, knifes are also frequently used in assault cases.

When a knife is used in a stabbing case, DNA and fingerprints can be exploited. In cases where textiles are damaged, fibres from the clothes of the victim can be transferred to the blade of the knife used for the assault. Thus, finding fibres non-differentiable from the clothing of the victim on the blade of the suspect knife can provide useful information to determine if the weapon was used to stab the victim.

This research simulates simple stabbings into fabrics with the use of a special holding device in order to minimize unwanted variations in the experiments. Different types of knives and blades (smooth or serrated) were used, as well as twogarments presenting distinct shedding capacities and textile structures. The number, the location and the density of fibres transferred on the blade were recorded for each replicate of all the simulations performed.

Stabbings in sequence into the two fabrics were also carried out in order to evaluate if the order of the sequence could be determined. Thus, several parameters were considered, notably the number and the distribution of the fibres transferred on the knife blade. The transfer of fibres into the wound (in our case ballistic soap) and on the area close to the second damage were also investigated in this aim. Our findings provide some clues in order to help determining a stabbing sequence.

Finally, this research also provides useful background information to forensic science experts both for the pre-evaluation and the interpretation of fibres transferred on knives after a single or a sequence of stabbings. It also provides some guidelines for the search and recovery of fibres on the crime scene as well as on knife's blades.

KEYWORDS: Damage to textiles; Secondary Transfer; Transfer Sequence; Stabbing Simulations; Fibre Localization

Bayesian Networks for the Age Classification of Living Individuals ------A study on transition analysis

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ABSTRACT: Over the past few decades, age estimation of living persons has represented a challenging task for many forensic services worldwide. Generally, the process for age estimation includes the observation of the degree of maturity reached by some physical attributes, such as dentition or several ossification centers. The observed degree of maturity is then converted into the estimated chronological age by means of some statistical methods. These, however, often present some statistical or practical drawbacks. The use of a probabilistic approach allows one to avoid these drawbacks by offering the possibility of coherently dealing with the uncertainty associated with age estimation and of assessing in a transparent and logical way the probability that an examined individual is younger or older than a given age threshold. Recently, Sironi (Int J Legal Med, 2014, submitted) has shown how probabilistic graphical tools, such as Bayesian networks, facilitate the use of the probabilistic approach. Probabilities of interest are assigned by means of transition analysis, a statistical parametric model which links the chronological age and the degree of maturity by means of specific regression models, such as logit or probit models. Since different regression models can be employed in transition analysis, the aim of this paper is to study the influence of the model in the problem. The analysis was performed using a dataset related to the ossifications status of the medial clavicular epiphysis and results support that the classification of individuals is not dependent on the choice of the regression model.

KEYWORDS: Forensic Medicine, Age Estimation, Interpretation, Probabilistic Approach, Bayesian Networks

Ultrasound-assisted low-density solvent dispersive liquid–liquid extraction for the determination of amphetamines in biological samples with gas chromatography-mass spectrometry

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ABSTRACT: A novel microextraction techniques based on ultrasound-assisted low-density solvent dispersive liquid-liquid microextraction (UA-LDS-DLLME) had been applied for the determination of amphetamines in biological samples (urine samples) by gas chromatography-mass spectrometry. Parameters affecting extraction efficiency have been investigated and optimized. Under the optimum conditions, linearities were observed for all analytes in the range from 0.15 to 10 μg/mL with the correlation coefficient (R) ranging from 0.9886 to 0.9894. The recovery of 75.6 – 91.4 % with RSDs of 2.5 – 4.0 % were obtained. The LODs (S/N = 3) were estimated to be in the range from 5 to 10 ng/mL. UA-LDS-DLLME technique had the advantages of less extraction time, suitable for batches of sample pretreatment simultaneously, and higher extraction efficiency. It was successfully applied to the analysis amphetamines in real human urine sample.

KEYWORDS: Dispersive liquid-liquid microextraction, Ultrasonication, GC-MS, Amphetamines, Biological samples

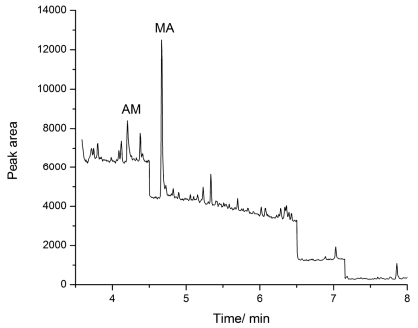

Figure 1: Typical chromatogram (SIM mode) of real urine samples after DLLME

Forensic Automatic Speaker Recognition Based on likelihod ratio using Acoustic-phonetic Features Measured Automatically

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ABSTRACT: This paper proposes a new method of forensic automatic speaker recognition system in the framework of likelihood ratio. This system uses a reference database to calculate the within-speaker variability and between-speaker variability. Some acoustic-phonetic features are extracted automatically using the software Voice Sauce. Their effectiveness was tested using two Mandarin databases: mobile telephone database and landline database. Results indicate that these acoustic-phonetic features do have some discriminating potentials and worth trying.

ABSTRACT: Likelihood ratio, Evidence evaluation, Forensic speaker recognition acoustic-phonetic

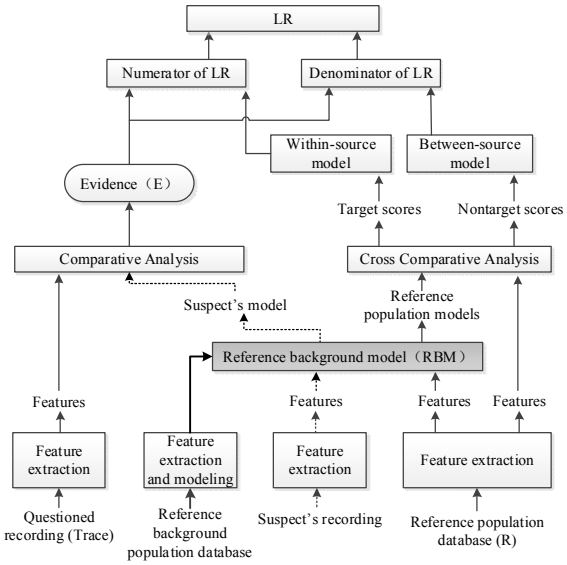

Figure 1: Principal structure of the proposed FASR system

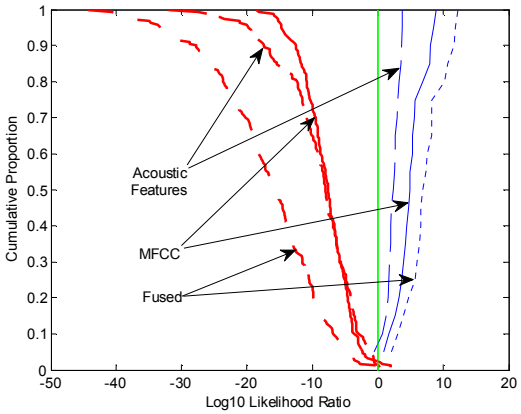

Figure 2: Tippett plot of the fused cross-validated LRs in the landline database

Expert Advisor in Criminal Proceedings: Institutional Reform and Empirical Observation

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ABSTRACT: The introduction of the expert advisor system into criminal justice is on the one hand based on the gradual disintegration of the traditional monopoly of public authority in judgment about professional issues and on the other hand based on frequent occurrence of forensic identification mistakes which often lead to miscarriages of justice. Compared with the UK's and the US' expert witness system, China's expert advisor system is unique in terms of access criteria, access procedures, sphere of influence and validity of opinions. In judicial practice, the expert advisory system still has many areas that need to be further improved in future reform, such as acquisition of basic material of expert opinion, access criteria and basic positioning of expert advisor in court.

KEYWORDS: Expert advisor, Forensic identification, Expert witness, Miscarriage of justice, Evidence

Research on several inspection methods about the sequence of copying files and sealing

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ABSTRACT: The examination of the sequence of a file and the seal on it is an important content of questioned document identification. In China, a formal document would take effect with a seal (including official seal or this happens) affixed rear, and whether a contract or a document is legal or not has a very important relationship to the order of the file content and the sealing time. Usually, the normal order of the formation should be write the text content first, and seal after the approval by the relevant personnel, that is ink before sealing. Therefore, correctly determine the sequence of the file and sealing becomes a means of identifying the authenticity of documents and determining if the document was made forged. But due to the interference by many factors, identification of this kind of cases has long been considered to be one of the difficult technical in the field of document identification.

Electrostatic copying file is one of the common forms of documents and contracts. Study on the sequence of copy files and the seal has certain representativeness. This paper chose three nondestructive approaches to study the order of copy files and the seal. They are 3-D stereo microscope method, fluorescence microscopy and contour ring method. Each method has its own advantages and disadvantages, but all of them have obvious effect on determine the sequence of copy files and sealing.

KEYWORDS: Sequence; copy files; sealing; 3-D stereo microscope method; Fluorescence microscopy; Contour ring method.