



**INTERNATIONAL UNION OF GEOLOGICAL SCIENCES
INITIATIVE ON FORENSIC GEOLOGY
ELECTRONIC NEWSLETTER**



Official Electronic Newsletter of the International Union of Geological Sciences, Initiative on Forensic Geology

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WELCOME FROM THE CHAIR

The International Union of Geological Sciences (IUGS), Initiative on Forensic Geology (IFG) was officially launched during the 62nd Executive Committee Meeting of the IUGS, which was held at UNESCO headquarters, in Paris, France, on 22nd February 2011. On 18th September 2011, the IUGS-IFG and its newly formed committee members became formally established and launched at an inaugural meeting in Rome, Italy

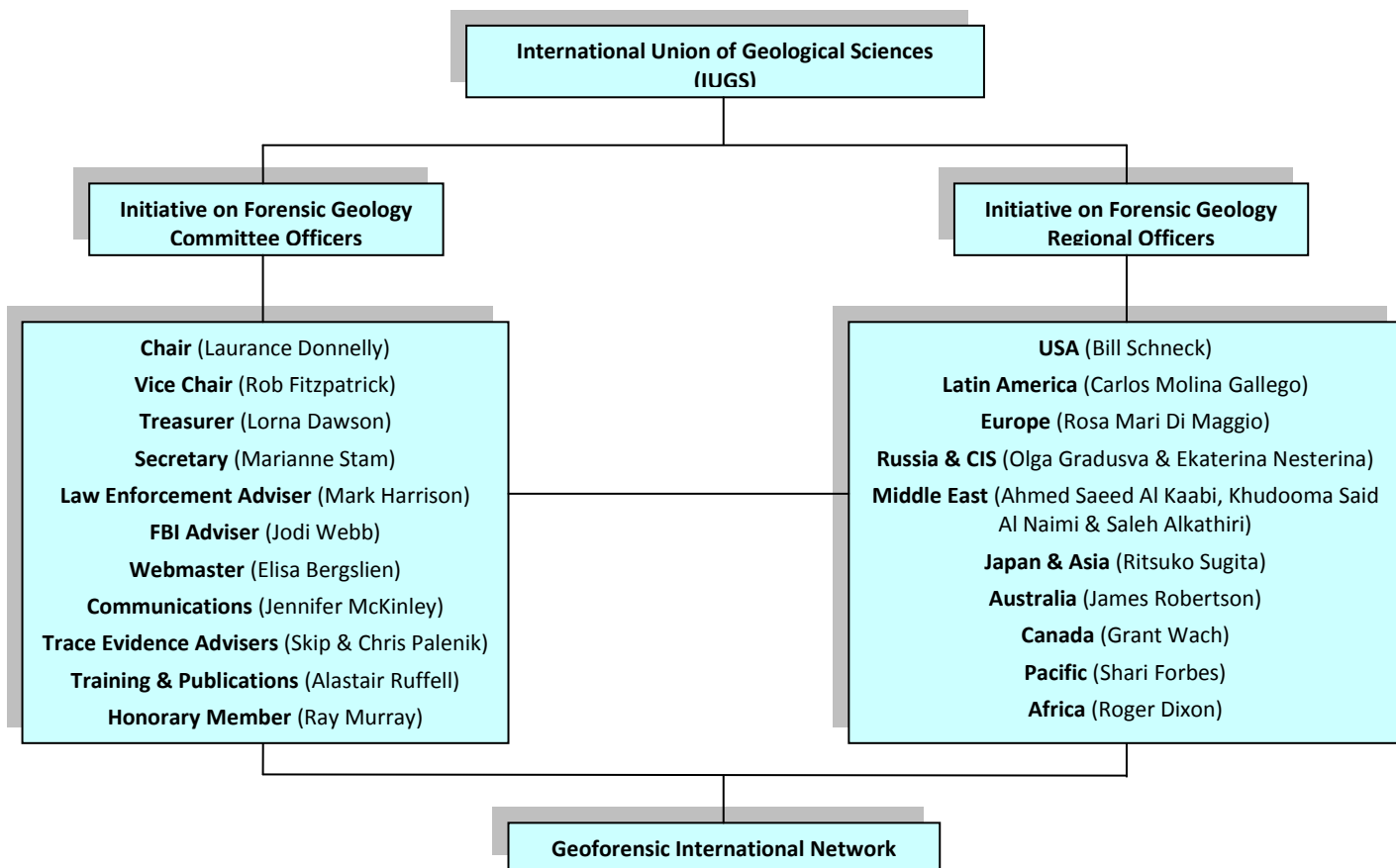


IFG Committee Inaugural meeting in Rome

IUGS-IFG's mission is; *'to develop forensic geology internationally and promote its applications'*. This will be achieved by capacity building (raising levels of awareness, knowledge and providing information about forensic geology), technology transfer and training (improvement of skill sets) and outreach (educating and informing the police and law enforcement organisations and the 'general public' about forensic geology).

IUGS-IFG has established a Committee to manage and develop the working group. This comprises representatives from major geographical regions of the world to give global coverage. It includes specialists

and experts from academia, industry, consultancy, operationally based geologists, the police, law enforcement agencies and forensic organisations



IUGS-IFG Committee Structure

The origin of Forensic Geology can be traced back to at least the latter part of the 19th Century. The science has since grown and developed throughout the 20th and 21st centuries, mainly focusing on the analysis of geological materials believed to be transferred onto a victim, offender, item or object during a criminal act. In the past decade or so there have been significant advancements in the applications of geology to ground searches for buried and concealed items and graves. Forensic Geology has expanded further and now encompasses domestic incidents, international terrorism, humanitarian, environmental, geohazards, mining, geotechnical, civil engineering, materials engineering and fraudulent investigations.

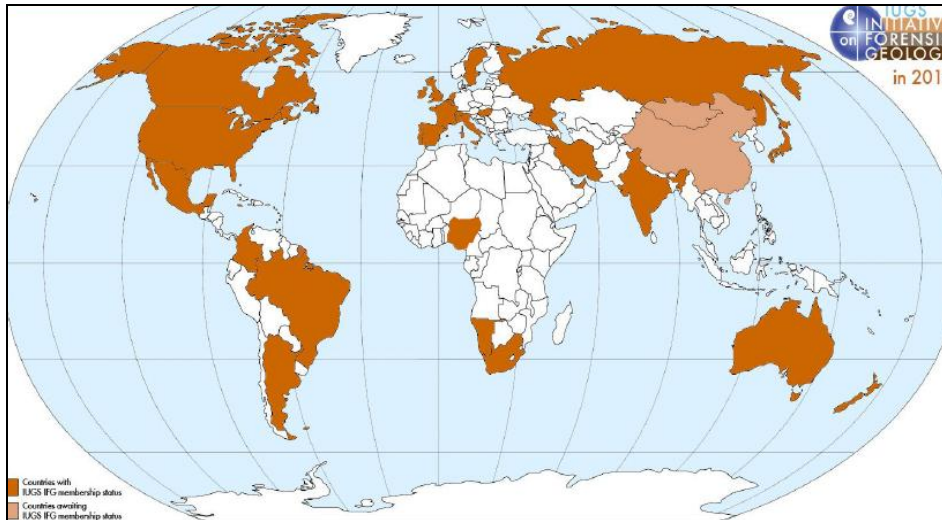
This informal newsletter is intended to keep IUGS-IFG Committee Members, the Geoforensic International Network (GIN) and those interested in Forensic Geology informed and up-to-date with the global events. This is the first newsletter and as such it contains information on Forensic Geology events that have taken place since 2011. It is expected that future newsletters will focus on more recent and future events. Further information may be found on the IUGS-IFG web site (<http://www.forensicgeologyinternational.org> or <http://www.forensicgeologyinternational.org>). This newsletter may be forwarded to geologists, police officers, law enforcement agents, teachers, students, members of the public and others with a professional or passing interest in Forensic Geology. IUGS-IFG welcomes your comments and feedback, articles and information within the scope and interests of Forensic Geology.

Yours sincerely

Dr Laurance Donnelly
Chair, IUGS Initiative on Forensic Geology

GEOFORENSIC INTERNATIONAL NETWORK (GIN)

The Geoforensic International Network (GIN) brings together forensic geologists, geoscientists and selected police/law enforcement officers from around the world, who have a desire and interest to develop Forensic Geology. GIN is free to join by new members sending their requests and a CV to an IFG Committee representative (details provided at the end of this newsletter). Current GIN member countries are shown below.



IUGS-IFG, Geoforensic International Network(GIN)

2012 EVENTS & ACTIVITIES

From the latter half of 2011 to December 2012, the following events were held:

American Clay Minerals Society (CMS) Conference, Nevada, September, 2011

Rob Fitzpatrick represented IFG at the American Clay Minerals Society (CMS) Conference on 24th-29th September 2011, held at Lake Tahoe, Nevada, USA, and presented papers on forensic soil science.

International Annual Meetings of the Soil Science Society of America, Texas, October, 2011

Rob Fitzpatrick represented IFG at International Annual Meetings of the Soil Science Society of America on 16th-19th October 2011, held at San Antonio, Texas, USA and presented papers on forensic soil science.

IUGS Executive Committee Meeting, Spain, February 2012

IFG was represented by Peter Bobrowsky (IUGS Secretary General) at the IUGS 63rd Executive Committee meeting. Peter provided a presentation supplied by Laurance Donnelly. This event was held on 14th-17th February, in San Sebastian, Spain. IUGS noted the excellent work undertaken by IFG during its inaugural year and endorsed IFG's continuation.

American Academy of Forensic Sciences (AAFS), Atlanta, Georgia, USA, February 2012

Marianne Stam and Skip Palenik represented IFG and participated in a two-day soils workshop and teaching in association with other American forensic scientists, at the American Academy of Forensic Sciences meeting, held in Atlanta, Georgia in February 2012. At this event a workshop on soil forensics was given by Skip Palenik.

National Policing Improvements Agency (NPIA), UK, Training Day, April 2012

Laurance Donnelly and Alastair Ruffell were invited by NPIA to attend a two-day training course on Forensic Archaeology at the NPIA training centre in Coventry, United Kingdom. This was organised by NPIA, Arts & Humanities Research Council, Serious Organised Crime Agency (SOCA) and the UK Missing Persons Bureau.

Servicio de Criminalística of Guardia Civil, Madrid, Spain, April, 2012

The seminar 'Análisis criminalístico de suelos' was held at the University of Alcalá, Alcalá de Henares, in Madrid, Spain, on 12th-13th April. The seminar and training session was organised by the Instituto Universitario de Investigación en Ciencias Policiales (IUICP) and the Servicio de Criminalística of Guardia Civil. IFG was represented by Lorna Dawson and Rosa Maria Di Maggio who demonstrated advances in soil forensics, the range of analytical procedures adopted by the different forensic science laboratories and the potential of forensic soil analysis within criminal investigations.

Geological Association of Canada (GAC), St John's, Newfoundland, Canada, May 2012

On 27th-29th May 2012, IUGS-IFG supported the Geological Association of Canada (GAC) and Mineralogical Association of Canada (MAC) conference, entitled 'Geoscience on the Edge', held at St. John's, Newfoundland, Canada. IFG was represented by Bill Schneck, Elisa Bergslien, Alastair Ruffell, Shari Forbes and Laurance Donnelly who delivered a series of lectures on geological trace evidence and search. The forensic geology session was attended by approximately 50 delegates with excellent feedback.

Environmental Forensic Field Investigation, Lethbridge College, Canada, May-June 2012

IUGS-IFG Honorary Committee Member, Dr Ray Murray, delivered a series of presentations on environmental forensics field investigations at Lethbridge College, Alberta, Canada, on 28th May to 1st June 2012. This course was attended by game wardens from Canada and around the world.

SWGEO meeting, Atlanta, Georgia, USA, June 2012

The Scientific Working Group on Geological Materials (SWGEO), held a meeting in Atlanta, USA. This was attended by a number of IFG committee members who also serve on the SWGEO committee including Bill Schneck, Skip Palenik, Marianne Stam, Ray Murray, Elisa Bergslien and Alastair Ruffell. Continued collaboration between SWGEO and IFG was recognised to be beneficial for the global advancement and development of forensic geology.

IUGS Council Meetings, Brisbane, Australia, August 2012

IUGS Council meetings were held on Sunday 5 August, at Brisbane International Conference Centre. IFG's chair (Laurance Donnelly) and vice-chair (Rob Fitzpatrick) were invited to attend and they provided IUGS committee members with an overview of the global status of forensic geology and IFG's activities and events. IUGS unanimously accepted the IFG proposals and commented on the excellent progress made by IFG in a relatively short time frame.

34th International Geological Congress (IGC) Brisbane, Australia, August 2012

At IGC2012 the session on Forensic Geoscience, organised by Rob Fitzpatrick and co-convened by Laurance Donnelly and Dallas Mildenhall was held on Monday 6th August 2012. The keynote was prepared by Laurance Donnelly and Jodi Webb (of the FBI) and a total of 9 papers were given on subjects including search, conventional geological trace evidence, palynology, diamonds and environmental forensics. The lecture theatre was full to capacity and was attended by in excess of 125 delegates.

Australian Federal Police (AFP) Brisbane, August 2012

IFG provided a series of knowledge transfer lectures and training for the AFP on 8-9 August 2012. IFG were represented by Laurance Donnelly, Mark Harrison, Rob Fitzpatrick, Shari Forbes, David Nobes, and Jennifer McKinley. A training course was delivered called, 'Design, Management and Management of Ground Searches using Geophysical Equipment'. This training focused on ground searches for homicide graves, fire-arms, weapons, drugs, money and items of value. Approximately 25 selected delegates attended comprising forensic and major crime investigators, anthropologists, archaeologists, detectives and forensic scientists. Attendees represented the AFP, Queensland Police, Western Australia Police, Victoria Police, Brazilian Federal Police, Netherlands Police Agency and Japan Criminal Investigation Bureau.

European Academy of Forensic Sciences Conference (EAFS), Netherlands, August 2012

The 6th European Academy of Forensic Sciences (EAFS) conference was held in The Hague, Netherlands on 20th-24th August 20-24. This was undertaken in collaboration with Lida van den Eijkel (Netherlands Forensic Institute) and in association with the Geological Society of London (GSL), Forensic Geoscience Group (FGG). The programme focused on soils as trace, search, taphonomy and archaeology. The International Union of Geological Sciences (IUGS), Initiative on Forensic Geology (IFG) and Geoforensic International Network (GIN) representatives included: Skip Palenik (held a special workshop on the power of using Polarising microscopes), Lorna Dawson, Shari Forbes, Rosa Maria Di Maggio, Ray Murray, Alastair Ruffell, Jennifer McKinley, Ruth Morgan, Olga Gradusva, Brenda Woods, David Hawkesworth, Patricia Wiltshire and Rob Fitzpatrick.

UK Outreach and Knowledge Transfer, 2012

Throughout 2012, a series of forensic geology outreach and knowledge transfer lectures were given in the UK to; National Policing Improvements Agency (NPIA), Home Office Centre for Applied Science and Technology (CAST), Greater Manchester Police, South Yorkshire Police, Northumbria Police, St. Bedes Primary School (Manchester), Neston Rotary Club (Merseyside), De La Beche Society (Royal School of Mines, Imperial College, London) and Blackpool Geographical Association.

The German Media, June 2012

In 2012, Lorna Dawson, Alastair Ruffell and Laurance Donnelly arranged for an interview with the German media to promote and develop forensic geology.



Field applications of EM38 and GPR, Australian Federal Police Training Centre, in Brisbane, Australia



Prof Skip Palenik and the forensic microscope to the delegatesmaster class team

GSA Annual Conference & Exposition, Charlotte, North Carolina, USA, November 2012

Elisa Bergslien represented IFG at the Geological Society of America (GSA) in Charlotte, North Carolina and presented on forensic geoscience.

Interpol, 2012

Ritsuko Sugita, of National Research Institute of Police Science, in Japan and IUGS-IFG officer for Japan and Asia was engaged by Interpol to review information on publications in forensic geology.

Environmental Forensics, 2012

The Geological Association Congress in Canada (May 2012) and the 34th International Geological Congress in Brisbane (August 2012) both included presentations on environmental forensics (Lorna Dawson).

2013 EVENTS & ACTIVITIES

IUGS 66th Executive Committee Meeting UNESCO, Paris, France, February 2013

On 20th February 2013, the IFG Chair (Laurance Donnelly) provided an update of IFG events and activities, to the IUGS Executive Committee, during the 66th Executive Committee meeting, held at UNESCO, in Paris. The feedback from IUGS was positive and IFG was encouraged to continue with the good work achieved in promoting and developing forensic geology throughout the world.

5th London Bullion Market Association Assaying and Refining Seminar, UK, March 2013

Roger Dixon attended the 5th London Bullion Market Association assaying and Refining Seminar in London, on the 10th-12th March 2013, where he gave a talk about the necessity for having physical record of the source of gold being sold for refining, rather than relying on a paper trail to prove that the material did not originate from conflict areas. Here, in theory, the knowledge of the geological origin and refining methods enables one to determine whether the gold has a tainted or clean origin.

Search Training, Serious Organised Crime Agency, SOCA, Leicestershire, UK, March 2013

On 27th March 2013, Laurance Donnelly took part in a knowledge transfer event and conference with the UK Serious Organised Crime Agency (SOCA), held at Leicestershire Police headquarters, UK. The objective for the conference was to raise awareness regarding the support and guidance available from experts operating within a range of academic disciplines, in the search for missing persons and 'no-body' murder victims. This event was intended for Police Search Adviser (PoSA) and the search community. It provided specific information regarding the contribution that forensic geology, enviro-archaeological profiling, archaeology, anthropology and biology, can make in the development of search strategies and tactics, assisted by

information from Lorna Dawson and Alastair Ruffell. Additional expert advice and display materials were available to describe the application and use of geophysical search equipment, victim recovery dogs, and the support available from the National Missing Person Bureau and National Missing Person Adviser.

European Geosciences Union (EU), General Assembly, Austria, Vienna, April 2013

In April 2013, Lorna Dawson participated in the EGU meeting in Vienna and presented a paper on the aim and objectives of the IUGS Initiative on Forensic Geology. The event was well attended with good and positive feedback and international 'support' for the development of forensic geology.

Forensic Geoscience, Chiba, Japan, May 2013

In May 2013, Ritsuko Sugita attended the Forensic Geoscience meeting in Japan to discuss global advances in Forensic Geology.

Police Commission, Missoula, Montana, USA, May 2013

In 2013, Ray Murray became Chair of the Police Commission in Missoula, Montana, USA. On 14th May 2013, Ray spoke at the wildlife crime scene/filed investigation seminar. In 2013, Ray's book, 'Evidence from the Earth', was published as a Chinese edition, by the Laboratory of Evidence Science, Chinese University of Political Science and Law.

1st Heavy Mineral School, University of Milan, Italy, May 2013

On 1st and 2nd May 2013, Skip Palenik visited the University of Milan and delivered a series of training lectures and practical sessions on the subject of forensic geology, lecturing to around 30-35, attendees, mainly PhD students.

3rd International Legal Forum which was held in St Petersburg, Russia, May 2013

From 15th-18th May 2013 Roger Dixon was invited by the Ministry of Justice of the Russian Federation to participate in a session devoted to the way forensic science is presented in different countries. The session was chaired by the Director of the Russian Federal Centre for Forensic Science.

Forensic Geology at the International School Science Fair, Cornwall, UK, July 2013

The International School Science Fair (ISSF) is an annual gathering of young scientists from around the world. The idea was originally conceived in 2004 at the Australian Science and Mathematics School in Adelaide, South Australia, when educators from many countries including; Australia, Singapore, Thailand, Korea and Japan came together and shared their reflections and understandings regarding student and teacher engagement in science and mathematics. This year, the ISSF came to the United Kingdom (UK) for the first time, being hosted at Camborne Science and International Academy, Cornwall on 12th-13th August 2013. Duncan Pirrie and Laurance Donnelly organised a forensic geology day for the students. The workshop comprised three main events: (a) the World Soil Map 2013 project; (b) a simulated crime scene and geological trace evidence recovery and analysis exercise and (c) a geological ground search for burials, such as weapons and items commonly used in crime, using geophysics. A popular press article was published describing the impact of this event (Pirrie et al., 2013).

INTERPOL, International Forensic Science Managers Symposium, France, October 2013

This 17th international meeting is held every three years, and in 2013 it took place from the 8th-10th October 2013 in Lyon France (Ritsuko Sugita, Japan National Research Institute of Police Science). This important forum brings together laboratory managers from INTERPOL countries across the world. At this meeting, Ritsuko Sugita presented an overview of forensic geoscience around the world as part of an international review on forensic science. Lorna Dawson presented a keynote talk on 'State of the Art Forensics' in forensic science, featuring forensic geology and forensic soil science. Both members of IUGS IFG outlined the extensive work of the IUGS-IFG and flyers were distributed at the poster session held in the INTERPOL headquarters in Lyon, France. Discussion with crime scene managers was held and an exchange of methods applied in different countries was carried out.

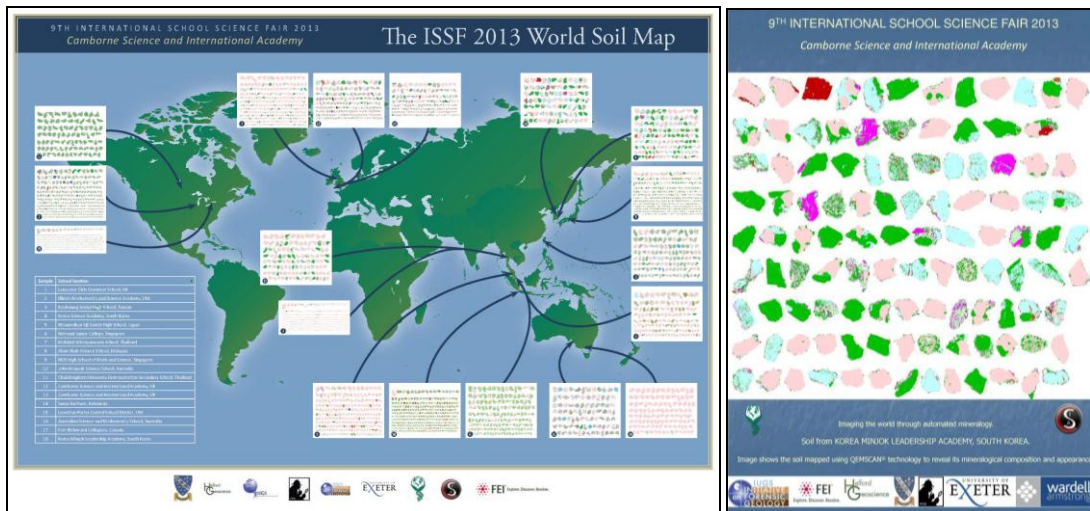
2nd Iberoamerican Workshop & Training, Brazilian Federal Police, Brazil, October 2013

This event was run in association with the Brazilian Federal Police (BFP), Geological Society of London, Forensic Geoscience Group,. The event was organised by Carlos Molina, Laurance Donnelly (IUGS-IFG), Marcelo Blum, Daniel Russo and Fabio Augusto da Silva Salvador from the Brazilian Federal Police (BFP). This took place at the Nacional Institute of Criminalistics (INC), Brasilia, Brazil, from the 2nd-4th October 2013. A series of presentations were followed by practical training sessions provided by IFG committee members including Alastair Ruffell, Carlos Molina, Shari Forbes, Jennifer McKinley and Roger Dixon. The workshop comprised two days of technical presentations and discussions, followed by a day-long training course in forensic geology. The Federal Police test site 'SITCRIM' was used as a mock crime scene with which to evaluate the samples. This facility was created specifically to test equipment used in search and proved invaluable as a location for

discussion of sampling locations (routes of access, suspect ground), and to deploy a spatial sampling scheme. Buried targets included a pig cadaver, loose cow bones, weapons (rifle and handgun), shell casings, barrels filled with a variety of materials (air, liquid and explosives), boxes and a computer.



Forensic Geology at the International School Science Fair (source: D. Pirrie & L. Donnelly)



ISSF World Soil Map (source, D. Pirrie)



IFG & Brazilian Federal Police Forensic Geology Workshop and Training, in Brasilia, Brazil

RFCFS, Ministry of Justice of Russia, Moscow, October 2013

A soil forensics and forensic geology knowledge transfer event was organised by the IUGS-IFG (Laurance Donnelly, Olga Gradusva and Ekaterina Nesterina), the Russian Federal Centre of Forensic Science (RFCFS), of the Ministry of Justice of Russia and the Geological Society of London Forensic Geoscience Group. This took place on 22nd October 2013 in Moscow, as part of a four day conference. This was the first international event of its kind to be hosted in Russia and the Commonwealth of Independent States (CIS) to specifically focus on soil forensics and forensic geology. A series of presentations and discussions were given by Laurance Donnelly, Rob Fitzpatrick, Alastair Ruffell, Lorna Dawson, Jennifer McKinley and Rosa Maria Di Maggio. The event was hosted by Prof Smirnova (Director, RFCFS), Ekaterina Nesterina and Olga Gradusva. It was attended by the Ministry of the Interior of Russia, the Police Service, Investigative Committee of Russia, Federal Drug Control Service of Russia and the Federal Security Service of Russia. Delegates were invited from Armenia, Australia, Azerbaijan, Belarus, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Netherlands, Northern Ireland, UK, Ukraine and USA.



RFCFS and IFG, Moscow, 22 October 2013

Geological Society of America (GSA), Denver, Colorado, USA, October 2013

IFG sponsored a forensic geology poster session at the GSA in Denver to help raise the profile and development of forensic geology throughout the USA and globally.

Geophysics Special Interests Group, Institute for Archaeologists (IFA), UK, October 2013

IUGS-IFG continued to develop strong links with the Geophysics Special Interests Group (GeoSig) to promote and develop association between forensic geology and forensic archaeology. In October 2013, Alastair Ruffell attended a GeoSig meeting in Bradford, UK, to discuss ideas for further collaboration including a joint meeting in 2014, in association with the Geological Society of London, Forensic Geoscience Group and Near Surface Geophysics Group.

Servicio de Criminalística of Guardia Civil, Madrid, Spain, November 2013

On 26th-27th November, Lorna Dawson delivered a session on soil as evidence at the Seminary 'Análisis Criminalístico de Suelos II'. The event was well attended and interaction was good with discussion about the range of analytical approaches used in the different European countries. The IUGS-IFG flier was distributed to attendees.

Lapworth Lecture on Forensic Geology, Birmingham, UK, November 2013

On Monday 4th November 2013 Alastair Ruffell delivered a lecture on forensic geology for the Lapworth Society, at Birmingham University, UK. The event was well attended with post lecture student discussion on the use of geological trace evidence to help investigate crimes.

Forensic Archaeology, Rome, Italy, November 2013

Alastair Ruffell and Rosa Maria Di Maggio attended the, 'International Workshop on Forensic Science and Archaeology' held on 22nd and 23rd November at the American University of Rome. The workshop was based on two different aspects of forensic archaeology: locating crime sites, and analysing crime sites. Presentations

and discussion on search and localization by means of geophysics, remote sensing, and geological materials were given by Ruffell and Di Maggio who had the opportunity to introduce the structure, aims and activities of the IUGS Initiative on Forensic Geology. This gained the interest of a number of participants who expressed interest in being part of the Geoforensic International Network (GIN), news of who will follow.

2nd International Conference on Engineering Geophysics, Al Ain, UAE, November 2013

From 24th-27th November 2013, IUGS-IFG participated in the European Association of Geoscientists and Engineers (EAGE), 2nd International Conference on Engineering Geophysics, held at the United Arab Emirates University, Al Ain, United Arab Emirates (UAE). Laurance Donnelly was a member of the conference Technical Committee and delivered the forensic geology keynote lecture on 25th November 2013, 'The Applications of Forensic Geology & Geophysics to Police and Law Enforcement Ground Searches'. Other presentations were given on ground searches, geophysics and geological trace evidence; by Saleh Ali Al Katheeri (Abu Dhabi Police), Colin Hope (Police National Search Adviser, National Crime Agency, UK), Mike Ferguson (Home, Centre for Applied Science and Technology, UK), Graham Peffers (Greater Manchester Police, Force Police Search Adviser UK), Jamie Pringle (University of Keele, UK), Peter Bull and Ruth Morgan (University of Oxford and University College London, UK), Peter Masters (Cranfield University and UK Defence Academy) and Skip Palenik (Microtrace, USA). The event was attended by approximately 150-200 delegates and included the Abu Dhabi Police, and police forces and forensic geologists from Oman, Kuwait, Qatar and Saudi Arabia. The event was highly successful and provided the basis for the expansion of forensic geology in the Middle East.

Abu Dhabi Police, Forensic Evidence Department, Abu Dhabi, UAE, November 2013

On 27th November 2013, IUGS-IFG delivered a series of capacity building presentations to the Forensic Evidence Department, Abu Dhabi Police, at their headquarters in Abu Dhabi. The event was organised by Saleh Ali Al Katheeri (Abu Dhabi Police and IUGS-IFG representative for Middle East) with support from Laurance Donnelly. Presentations were given on police and geological strategies for searching the ground, vehicles, buildings and marine environments and on the use of geological trace evidence to help identify (provenance) search areas. Presentations were delivered by Laurance Donnelly, Skip Palenik, Colin Hope, Mike Ferguson, Graham Peffers, Peter Masters, Peter Bull and Ruth Morgan. The formal presentations were followed by demonstration and training on deployment of ground penetrating radar and electromagnetic search assets to locate a firearm, which was buried in a secure control site within the grounds of Abu Dhabi Police headquarters. Practical advice was also provided on counter-terrorism vehicle and building searches for Improvised Explosive Devices (IEDs).

Abu Dhabi Navy and Abu Dhabi Coast Guard, United Arab Emirates (UAE), November 2013

On 26th November 2013, Mike Ferguson (UK Home Office, CAST) and Laurance Donnelly were invited to meet the Abu Dhabi Navy and Abu Dhabi Coastguard at the Armed Forces, Navy Headquarters, located in Abu Dhabi. The purpose of the meeting was to provide introductory presentations on marine search strategies for missing objects and to demonstrate the use of a diver-held sonar instrument, the Navigator D38. This instrument is currently restricted for use in the UK for the British military and it is used by the police to search streams, rivers, ponds, lakes reservoirs, seas and estuaries. The sonar instrument was transported to the UAE by Mike Ferguson and was tested by the UAE Navy and Coastguard in a secure marine location.



Abu Dhabi Police and IFG, Abu Dhabi, 27th November 2013

SWGCEO meeting, Atlanta, Georgia, USA, November 2013

Members of IUGS-IFG and the Scientific Working Group on Geological Materials (SWGCEO), held a meeting in Atlanta, USA. This was attended by a number of IUGS-IFG members who also serve on the SWGCEO committee including; Jodi Webb, Maureen Bottrell, Elisa Bergslien, Dick Bisbing, Andy Bowen, Brad Lee, Kim Mooney, Bill Schneck, Skip Palenik, Marianne Stam, Ray Murray, Elisa Bergslien and Alastair Ruffell. Continued collaboration

between SWGGEO and IFG was recognised to be beneficial for the global advancement and development of forensic geology. The possibility to hold an IUGS-IFG meeting in 2014 was explored, to discuss the proposed IUGS-IFG document, 'A Guide to Forensic Geology'.

International Association of Mathematical Geoscientists (IAMG), December 2013

Throughout 2013, the joint roles of the IUGS-IFG Communications Officer and Executive Vice President of IAMG (2012-2016) have provided Jennifer McKinley the opportunities to promote the applications of Geographic Information Systems (GIS) and special mathematics in forensic geosciences with the UK, Europe Forensic Science Regulators and law enforcement agencies worldwide. This has included the provision of training and the promotion of geoinformatics in forensic geoscience for the Australian Federal Police (AFP), Brazilian Federal Police (BFP) and Russian Federal Centre of Forensic Science (RFCFS).

Outreach Presentations

Numerous presentations were provided by IFG to draw attention to Forensic Geology and these have included the following:

- Geological Society of London, Northwest Regional Group, Manchester University, UK, 28th February 2013
- Institution of Mining and Metallurgy, Western Branch, Keele University, UK, 4th March 2013
- British Geological Survey, Nottingham, UK, 23rd July 2013
- Institution of Mining and Metallurgy, Western Branch, Keele University, UK, 7th October 2013
- Christ the King Roman Catholic School, Lancashire, UK, 5th March 2013

FUTURE EVENTS

IUGS-IFG has currently agreed to hold the following events:

- Outreach, Bath Geological Society, UK (to be confirmed)
- Outreach, Western Regional Group, The Geological Society, UK (to be confirmed)
- Outreach, Channel Islands Group of Professional Engineers, UK, 19th-20th November 2014
- Outreach, Earth Science Teachers Association, Royal Institution, UK, 1st July 2014
- Outreach, Oxford University UK, 3rd July 2014
- A meeting to discuss and progress the IFG document in progress, 'A Guide to Forensic Geology', will be held in 2014, possibly in Atlanta, USA in September or October 2014 (to be confirmed)
- Day of the Dead: Recent Research in Human Osteoarchaeology (this may include elements of forensic geology and search, to be confirmed), 17th-19th October 2014.
- Forensic Geoscience, Future Horizons, 3rd December 2014, Geological Society of London, UK
- Recent Work in Archaeological Geophysics, 2nd December 2014, Geological Society of London, UK

A calendar of meetings of interest to IUGS IFG and GIN members is posted on the IUGS IFG website (<http://www.forensicgeologyinternational.com/>). Specific information about these meetings can be found there.

AWARDS & NEWS FEATURES

Dr Laurance Donnelly was awarded the Certificate of Merit by the Russian Federal Centre of Forensic Science (RFCFS) of the Ministry of Justice. The award was presented by Prof Smirnova at the First Soil Forensics and Forensic Geology Knowledge Transfer Event held in the Headquarters of the Russian Federation and Commonwealth of Independent States (CIS), Moscow, on the 22 October 2013. Dr Laurance Donnelly was also the recipient of the Geological Society of London (GSL), Forensic Geoscience Group (FGG) Award in recognition of his pivotal role in global forensic geology and gratitude from the group for its formation.

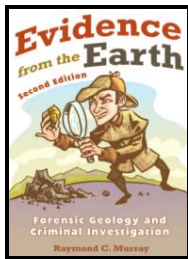
Dr Duncan Pirrie was acknowledged by IUGS-IFG & FGG for his contributions to forensic geology. Duncan served as the first treasurer of both IUGS-IFG & FGG.

FLIER

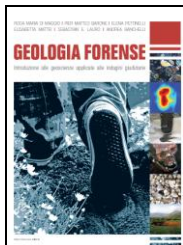
IUGS-IFG a draft flier on Forensic Geology is available in electronic format (as a pdf) and a printed version.

IUGS-IFG Flier

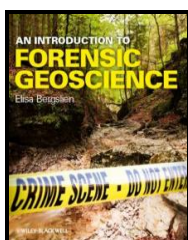
PUBLICATIONS



Evidence from the Earth by Ray Murray has been translated and published in China by the Key Laboratory of Evidence Science (China University of Political Science and Law).



Geologia Forense by Maria Di Maggio, Pier Matteo Barone, Elena Pettinelli, Elisabetta Mattei, Sebastian Lauro and Andrea Banchelli and has been published in Italy (in Italian).



An Introduction to Forensic Geoscience by Elisa Bergslien.



Environmental and Criminal Geoforesics is a special publication by the Geological Society of London, edited by Duncan Pirrie, Alastair Ruffell and Lorna Dawson

In 2012-2014 several papers, conference proceedings, magazine and web articles were published by IFG members. A review, compiled by Ritsuko Sugita for INTERPOL contains over approximately 220 articles and was published in 2010 to 2012 on or including forensic geology. Several of the publications listed below were taken from this INTERPOL document.

1. **Sugita, R., Hiromi, I., Fukushima, H. 2013. Forensic Geology, 2010 to 2012. A review for INTERPOL, National Research Institute of Police Service, Kashimanoha, Kashiwa, Japan.**

Books

2. **Bergslien, E. 2012.** An introduction to forensic geoscience. Wiley-Blackwell.
3. **Murray, R. 2014.** Evidence from the Earth (2004). Mountain Press Publishing, USA. This book has been translated and published in China by the Key Laboratory of Evidence Science (China University of Political Science and Law).
4. **Di Maggio, R. M., Matteo Barone, P., Pettinelli, E., Mattei, M., Lauro, S., Banchelli, A. 2014.** Geologia Forense. Introduzione alle geoscienze applicate alle indagini giudiziarie. Italia.
5. **Gradusova, O., Nesterina, E., Peleneva, M. 2014.** Atlas of exotic, anthropogenic and extraneous particles in soil. Russian Federal Centre of Forensic Science, Ministry of Justice, Moscow (in Russian) (pending).
6. **Pirrie, D., Ruffell, A., Dawson, L. 2014.** Environmental Geoforensics. Geological Society of London Special Publication, 384, pp273.

Book Chapters

7. **Donnelly, L. J. 2013.** Use of Geology in Forensic Science: Search to Locate Burials. In: Elias S.A. (ed.) The Encyclopedia of Quaternary Science, Vol. 4 pp. 521-534. Amsterdam: Elsevier.
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CONTRIBUTIONS

Contributions to IUGS IFG E-Journal are welcome from members of the IUGS IFG and GIN. Please send your contributions to Jennifer McKinley by e-mail (insert in Subject line: Contribution to IUGS IFG E-Journal). The contributions will be reviewed and may be shortened.

CONTACT DETAILS

For further information

<http://www.forensicgeologyinternational.org> or <http://www.forensicgeologyinternational.org>



Chair

Dr Laurance Donnelly

Wardell Armstrong International
2 The Avenue
Leigh
Greater Manchester, WN7 1ES
United Kingdom
T: +44 (0)7970 038 236
E: ldonnelly@wardell-armstrong.com

Vice Chair

Dr Rob Fitzpatrick

CSIRO Land and Water
Private Bag No. 2
Glen Osmond
South Australia, 5064
T: +61-8-8303 8511
E: rob.fitzpatrick@csiro.au

Treasurer

Prof Lorna Dawson

The James Hutton Institute
Craigiebuckler
Aberdeen AB15 8QH
Scotland, UK
T: +44 (0) 1224 395 328
E: Lorna.Dawson@hutton.ac.uk

Secretary

Ms Marianne Stam
California Department of Justice
Riverside
California
USA
E: marianne.stam@doj.ca.gov

Training & Publications

Dr Alastair Ruffell

Department of Geography
Queens University Belfast
University Road
Belfast BT7 1NN
T: +44 (0) 28 9024 5133
E: a.ruffell@qub.ac.uk

Communications

Dr Jennifer McKinley

Department of Geography
Queens University Belfast
University Road
Belfast BT7 1NN
T: +44 (0) 28 9024 5133
E: j.mckinley@qub.ac.uk