**Strathclyde Postgraduate Law Conference 2018**

**Programme**

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**26th October 2018**

Conference Theme: Regulating a Society in Transition: Legal Responses to Technological Challenges

The conference theme has been developed in response to recent high-profile scandals which reflect the significant challenges posed to current legal regulation by information technologies.

Modern day technologies are transforming the way in which we communicate, socialise, work, learn, travel, receive healthcare, deliver justice and even participate in democratic societies. Technologies are rapidly proliferating creating complex legal questions and regulatory challenges. Is there a need for legal regulation of modern-day technologies? Does technology challenge social and cultural norms? As technology becomes woven into the fabric of society will there be unintended effects? In which ways do technologies challenge current regulatory regimes? Are current legal responses adequate?

Our conference theme is designed to bring researchers together from different legal research disciplines to consider the challenges the law faces in these times of change.



Regulating a Society in Transition

Strathclyde Law School (Lord Hope Building)

Friday 26th October 2018

Schedule

**8.30am Registration and Welcome**

**9am –10:45am Session One**

Panel 1 (Confucius Room)

Chaired by Dr Michael Randall (University of Strathclyde)

* David Blair, *Pokemon Go Away! Augmented Reality Technology and Unwanted Interference with Heritable Property*
* Felix Boon*, Ifs, But For’s and Maybes: Causation Issues and Autonomous Vehicles*
* Mohanad Hamad Ahmed, *The Relationship Between Technology Revolution and Verb Tenses and its Impact on Electronic Contracts of Sale*
* Paulina Berger, *Deregulation of Crowdlending*

**10:45am – 11am Coffee Break**

**11am – 12.45pm Session Two**

Panel 3 (LH 229A)

Chaired by Mr Donald Campbell (University of Strathclyde)

* Xiaochen Mu*, Primary Concepts Related to Virtual Property*
* Amy Thomas, *eSports as Traditional Sports: Consequences for Copyright*
* Osama Aftab, *The notion and challenges of surrogate rights under copyright law with respect to digital reproductions of artistic works in the public domain*
* Corsino San Miguel, *Imagine a world without trust… Criminal Law and the decision to trust others*

Panel 4 (Confucius Room)

Chaired by Dr Elaine Webster (University of Strathclyde)

* Laura Martin, *Employee Surveillance: The Road to Surveillance is Paved with Good Intentions*
* Noura Almutairi, *The Influence of Technology on the Concept of the Right to Privacy*
* Lydia Hazlehurst, *To Tweet or nor to Tweet: An Analysis of the Impact of Judicial Networks on Judicial Independence and Accountability in the United Kingdom*
* Abdullah Bin Humaid, *Child Pornography Crime on the Internet in the Legal System of Saudi Arabia*

**12:45pm – 1:15pm Lunch**

**1:15pm – 2:30pm Expert Panel (Confucius Room)**

* **Professor Mike Nellis, *The Question Concerning [the Regulation of] Technology*** (Emeritus Professor of Criminal and Community Justice in the Law School, University of Strathclyde)
* **Dr Oles Andriychuk, *Net Neutrality and Competition Law: Knocking on Open Doors*** (University Stirling Law School – due to join the University of Strathclyde Law School in January 2019)

**2:30pm – 4pm Session Three**

Panel 5 (Confucius Room)

Chaired by Dr Mary Neal (University of Strathclyde)

* Ke Song*, Judicial Integration of Technological Development in the Settlement of UNCLOS Disputes*
* Kaushik Paul, *Religious Dress before the United Nations Human Rights Committee: An Analysis*
* Israel Cedillo Lazcano*, Regulating ‘Cryptoassets’ Following the Scottish Tradition*

**4pm – 4:15pm Coffee Break**

**4:15pm – 5pm Keynote Address (Confucius Room):** “*Criminal Justice and technology: what the recent past tells us about the near future.”* By Professor James Fraser (Professor of Forensic Science at the University of Strathclyde, Associate Director of the Scottish Institute for Policing Research and a past President of the Forensic Science Society)

**5pm – 5.45pm Drinks Reception (Confucius Room)**

**6pm Informal drinks at Drygate, Glasgow**

Abstracts

***Pokemon Go Away! Augmented Reality Technology and Unwanted Interference with Heritable Property***

David Blair

Anderson Strathern LLP

Augmented reality technology has grown in popularity in recent years and is increasingly utilised by companies for a variety of purposes from gaming to advertising. The nature of AR technology presents a novel challenge to property owners. For the first time in history, it is possible for a developer to place “virtual property” within the boundaries of someone’s heritable property. This virtual property has many of the characteristics of corporeal moveable property as it is geographically located, can move around and, in certain cases, may be interacted with by individuals. The key distinction is that this property is only perceivable with the assistance of particular technology.

Despite the fact that a landowner may not be able to perceive the virtual property on their land, they may have a number of reasons for wishing to prevent its intrusion. They may object to the existence of the property on their land on principle; there have been a number of sad examples with the *Pokemon Go* app of virtual gaming objects being placed in highly inappropriate environments. The existence of the property on land may also encourage an increase in unlawful entry onto the land in order for intruders to interact with the virtual property using the relevant technology.

This paper will address the extent to which the common law is able to respond to this unique challenge to property owners. A number of potential legal devices will be considered including the law of nuisance, the law of trespass and inducement to trespass. The paper will conclude that while any common law response would require development of the basic principles beyond their current limit, an evolutionary approach could allow landowners sufficient control of their property without recourse to legislative intervention.

***Ifs, But For’s and Maybes: Causation Issues and Autonomous Vehicles***

Felix Boon

Zurich Insurance Group Ltd

The Automated and Electric Vehicles Act 2018 provides that, where an accident involving an automated vehicle in self-driving mode causes damage or injury, then, depending on the insurance status of the vehicle, the insurer or owner will be strictly liable for the damage. Section 5 of the Act also creates a form of statutory subrogation for liable insurers and owners against any other person liable to the injured party in respect of the accident.

Section 5 actions will likely be advanced as product liability claims, ostensibly treading familiar ground as to the standards of care owed to the injured party. In contrast, due to the nature of their design and construction, it is submitted that causation issues in autonomous vehicle claims will be significantly more complex than traditional product liability claims.

In 2007, a 2005 Toyota Camry crashed in Oklahoma, seemingly caused by a software fault that made the vehicle accelerate uncontrollably. In the investigation that followed, NASA spent 10 months reviewing the throttle control system but were unable to establish the proximate cause of the accident. The technology has become much more complicated since then.

This paper will consider how traditional models of causation might accommodate these technological changes. In particular: having regard to the increasingly sophisticated vehicle architecture of hardware, software, sensors, navigation systems and connectivity infrastructure, how independent and interdependent causes might be said to operate; similarly, given their increasing opacity, autonomy and capacity to self-modify, the extent to which algorithms can be analysed using concepts like inherent vice; and, finally, whether the causal analysis applied to medical negligence cases might offer a solution to this problem.

***The Relationship Between Technology Revolution and Verb Tenses and its Impact on Electronic Contracts of Sale***

Mohanad Hamad Ahmed

University of Strathclyde, Scotland

New technologies in communications have accelerated daily transactions by concluding contracts instantly between persons spotted in different countries. Basically, to conclude a contract offer must match acceptance depending on parties’ intentions. Intentions are naturally invisible unless unearthed explicitly by uttered verb tenses. Consequently, verb *tenses* have impacts on concluding contracts. However, contracting using past tense differs than using present or future tenses. According to Iraqi and Sharia laws, some tenses conclude the contract, others do not, while a third category is in-between. Therefore, such tenses were envisaged as criterions to measure the extent of parties’ intentions or ‘*meeting of minds’* to make a contract.

We highlighted this problem using a critical, analytical and comparative approach between Iraqi and Sharia laws to fill the gaps in the legal paradigm. As a result, we have compared these tenses and found that texts, words and even letters have significant roles in concluding contracts. Furthermore, Iraqi Civil Code is derived from Sharia law, which is dated back for more than 1400 years. At that time, there was only the formal language when street language was not yet in existence. Nowadays especially in Facebook marketplace, countless numbers of sales are conducted hourly and the vast majority of them is performed using *slang* or street language. Therefore, applying Iraqi and Sharia laws regarding verb tenses would obstruct daily transactions patently because these laws are tailored only to fit with formal language.

To sum up, some tenses affect contracts positively by considering them as criterions determining the extent of parties’ intentions. However in the light of electronic contracts, another category of these tenses restricts electronic commerce as such they should be reviewed by Iraqi law-making committee to come up with new technology challenges.

***Deregulation of Crowdlending***

Paulina Berger

University of Siegen, Germany

Crowdlending which is also known as Peer-to-Peer or Peer-to-Business Lending is one of the most important and fast-growing markets of alternative ﬁnancing. However, not all of the rule makers understood the change in the ﬁnancial market and the necessity of this kind of alternative ﬁnancing to support SME’s or private households. The UK was one of the ﬁrst states which utilize the advantages of this kind of ﬁnancing and promoted it with direct ﬁnancial investments and the implementation of a speciﬁc legislation. Also, France decided to establish a similar legislation. In comparison to the three big European crowdlending markets, Germany is the only one without any speciﬁc regulation on crowdlending. Rather than the borrowers and lenders require a banking license for the realization of the real crowdlending. To avoid that, the German model is working with an avoidance model which is based on a cooperation with a traditional bank. This cooperation will have consequences on the conditions of a crowdlending credit because the banks will have the ability to dictate the conditions of a crowdlending credit which makes it less attractive. In the end, the crowdlending in Germany is actually no alternative ﬁnance anymore but rather a normal bank credit. The solution to that issue will be the implementation of a speciﬁc crowdlending regulation following the examples set by the UK and France. Even after an implementation of the planned EU directive of crowdfunding a speciﬁc regulation in each European member will be still necessary because the new directive only intended to lighten the regulation on Peer-to-Business Lending and do not regulate the Peer-to Peer Lending. Without a speciﬁc national regulation, the most member states can’t realize the Peer-to-Peer Lending with all its beneﬁts.

***Primary Concepts Related to Virtual Property***

Xiaochen Mu

University of Exeter, England

The emergence of legal issues in relation to virtual property, with the growth of internet technology, has challenged traditional legal theory. However, the transition from traditional property to virtual property demands more attention. If legal community want to provide legal protection for virtual property, there are many basic questions that should not be ignored.

At the very outset this paper starts by establishing the definition of virtual property. virtual property is user-generated online content, which contain users’ personal private information (online activity), investment and original idea. This paper establishes layer theory to divide virtual property into three levels. The property at first level belong to service providers and provide underlying environment for further development. The items at second level created by service provider and protected by IP, and they also belong to service providers. Eventually the property at third level are user’s virtual property as users invest time, money and labour on them. Based on the layer theory, this paper then clarify the classification and characteristic of virtual property.

Virtual property, as a concept, is important for continued investment into digital goods and information. Current property protections differ in their scope and this leads to uncertainties and lacunae of protection. The concept of virtual property will make clear the boundary and classification of certain property in order to provide systematic protection for users, whilst also enabling right holders to understand to what extent they can use virtual property and how to use them in operating their business. In accordance with this purpose, this paper distinguishes the difference between virtual property and intellectual property, contract, chattels and privacy.

***eSports as Traditional Sports: Consequences for Copyright***

Amy Thomas

University of Glasgow, Scotland

The adage “if it can be done while drinking and smoking then it’s not a sport” is increasingly becoming less relevant in the digital era. Sports philosophers acceptance of the legitimacy of eSports is growing, despite lacking traditional requirements of physicality and bureaucracy. However, is this news necessarily welcome, or in keeping with our perspective of contemporary sports as we currently understand them through a copyright lens? Our classiﬁcation of contemporary sports are rooted in their distinctly un-copyrightable nature as rules and systems, justifying, amongst other measures, a valuable broadcasting right. Conversely, video games, of which eSports are based, are fundamentally rooted in the protected materials embedded within their very code. Inevitably, the ownership of this code will present unique challenges for this new industry; how can a sport grow where someone quite literally “owns the ball”? Is there any justiﬁcation for reserving complete ownership and discretion to broadcast eSports tournaments and video game content where primary revenues are derived from game sales?

Following the ﬁrst EU parliamentary discussion on eSports, the industry has been left to self-regulate. Nonetheless, there may be potentially mitigating factors within the existing copyright regime: eSports players could claim performance rights over their gameplay in tournaments; broadcasters could argue that they are communicating gameplay to a new public; perhaps joint authorship could be claimed by players and broadcasters alike. Whether these measures will be enough to limit the - surely unintended consequence of - executive ownership of eSports, time will tell.

***The notion and challenges of surrogate rights under copyright law with respect to digital reproductions of artistic works in the public domain***

Osama Aftab

University of Kent

Cultural institutions such as museums and art galleries have claimed copyright over images of artistic works such as paintings and sculptures in their collection. These ‘copies’ of original artistic works are referred in some art and cultural heritage studies as ‘surrogates’, as they act as replacement or substitute for the original object. This practice of claiming copyright over photographs of material cultural objects has subsisted for some time and has now evolved due to digitisation and modes of digital access to artistic works online. The focus of this research is the practice of cultural institutions of claiming ‘authorial’ rights or sometimes ownership rights under copyright law. This has been referred by Wallace and Deazley as ‘surrogate right’. This copyright claim over surrogates is particularly significant for cultural institutions who intend to benefit from artistic works in their collection through licensing fees from access and distribution of surrogates or want to restrict use of surrogates for other reasons.

The question is whether ‘surrogates’, particularly of ‘artistic works’ that are ‘out-of-copyright’ and have passed into the public domain can be protected under copyright laws, or whether an alternative mode of protection needs to be developed for such works. The debate goes to the heart of purpose and functions of copyright, and what ‘originality’ means in terms of *‘artistic works’*. *‘Surrogate rights’* have great legal and existential challenges in justifying their existence under copyright laws, particularly considering the lack of harmonisation among jurisdiction, the various justifications of copyright, and the uncertain standards of originality. Copyright law, even in the UK, has not fully settled this matter. This challenge has potential implications for the economic rights of cultural institutions and expectation of the society with respect to greater and freer public access to cultural heritage objects such as artistic works which are in the public domain.

***“Imagine a world without trust…” Criminal law and the decision to trust others***

Corsino San Miguel

University of Glasgow, Scotland

Punishment’s justification has been the dominant concern of criminal law scholars for decades. Where retributivists see punishment as an ontological appropriate (deserved) response to wrongdoing, their consequentialist counterparts, playing right into their hands, have regarded criminal punishment as *functionally* justified. Remarkably, a proper debate about the *function* of the criminal law itself (beyond legal punishment) is missing. This is precisely the aim of this paper defending a socially grounded institutional role of the criminal law.

The very survival and development of human race depends on our ability to surround ourselves with people who believe what we believe. Sharing values and beliefs we trust strangers. Nonetheless, trust is a feeling that implies vulnerability, deception, exploitation and betrayal. Thus, why do we make ourselves vulnerable to others? Simply, because when we trust “we need do nothing” and we can focus in the things that are really important to us. From the perspective defended in this paper, the function of the law in general and criminal law in particular is to endorse trust between strangers.

Modern societies exit within a constellation of institutional structures. For purposes or *functions* beyond mere biological or physical structures we collectively attribute certain *status* to persons, objects or other entities. The institutional structure derived from the *status-function* encloses a waterfall of deontic-normative powers that provides status holders with a common reason for action in their practical reasoning. Institutional structures guide us but also disclose to others what they can expect from us. Only within normative frameworks of reciprocal and *institutional expectations* we can interact, cooperate and trust strangers.

The legitimation of criminal law in this picture is defined as the guarantor who secures the institutional identity of the society against those conducts that contravened the general normative model of orientation or guidance in social interaction that the institutional structure defines. The maintenance of *institutional* *expectations* legitimates the use of punishment as a means to guarantee the validity of the institutional normative framework.

***Employee Surveillance: The Road to Surveillance is Paved with Good Intentions***

Laura Martin

University of Strathclyde, Scotland

Whilst the mainstream narrative warns of the dystopian visions of robot workforces, little attention is being paid to the current affect of information technologies on the nature and quality of human work. Informational technologies are affording employers with remarkable monitoring aptitudes that even extent beyond the localised working environment and enable 24/7 surveillance of the worker. The modern workplace sits at the epicentre of converging storms of surveillance technologies. Labour markets are also transforming with emerging models of work not only endorsing but reliant upon surveillance of the worker to conduct business

The nature and scope of modern-day surveillance has the potential to seriously impair the rights of workers. Despite being a contested concept, privacy of the worker is increasingly diminished and undermined. However, employers also have extensive justifiable interests in undertaking surveillance of the workforce. Legal responses have attempted to create a principled response to worker surveillance, mediating between workers’ and employers’ competing rights and interests.

However, legal regulation has struggled to keep pace with significant technological developments delineating the nature and scope of surveillance at work. Law has under-anticipated technological advancements and their impact on privacy rights. The ‘old’ regimes capable of regulating worker surveillance have been replaced or significantly advanced as policymakers and the Courts have attempted to respond to the changing conditions of modern society.Can current legal sources ensure adequate regulation of worker surveillance?

Three main legal sources are considered:

* **Article 8 of the European Convention on Human Rights**
* **Domestic Labour Law** – Unfair Dismissal & The Mutual Duty of Trust and Confidence
* **Data Protection** - The EU General Data Protection Regulation 2016 & UK Data Protection Act 2018

Current legal regulation is found to be inadequate, resulting in fragmented and status dependent privacy protection. This paper will consider if further legal regulation is necessary or whether extra-legal solution are required.

***The Influence of Technology on the Concept of the Right to Privacy***

Noura Almutairi

University of Dundee, Scotland

Revolutions in technology have played an important role in modifying the meaning and nature of the right to privacy. Prior to the latest technological revolution, the definition of the right to privacy mainly referred to physical privacy, with many philosophers defining it as ‘solitude’ or ‘seclusion’; in other words, withdrawing or separating oneself from society. Others, meanwhile, described the right to privacy as limited access to the self, including the body and private property. For instance, entering a house without the permission of the owner, or interfering with the private decisions of individuals, such as abortion. Violations of privacy were therefore more visible previously, because the meaning of the right to privacy was clearer.

The widespread use of the internet, enabling the collection and storage of information, has greatly jeopardised privacy, particularly through the invention of social media platforms such as Twitter and Facebook, where people post a great deal of private information, without realizing that third-parties can obtain such information, and even make it go viral, causing serious distress to affected individuals. The example of the recent Facebook scandal demonstrates that there are now significant threats to the right to privacy, perhaps more so than any time before. However, rather than physical privacy, it is informational privacy that is at risk.

Despite this distinction, there is a significant lack of determination of the meaning of the right to privacy online, meaning many violations are unidentifiable. It is therefore necessary to pursue an accurate definition of the right to privacy online, so that violations of the right to informational privacy can be identified. This paper thus presents the transition and evolution of the meaning of the right to privacy, and outlines an accurate definition of the right to privacy online, for technological era.

***To Tweet or not to Tweet: An Analysis of the Impact of Digital Networks on Judicial Independence and Accountability in the United Kingdom***

Lydia Hazlehurst

University of Liverpool, England

Considering the principles of judicial independence and accountability, this paper will assert that digital networks have created a virtual space in which the public can communicate, absorb and disseminate information about judges themselves and judicial decision making in new and unpredictable ways. The potential universe of the internet has exponentially increased the risk of perceived bias and has provided new challenges to the expectation of an independent judiciary. These digital networks as ‘resources for discourse’ have impacted on the way in which the judiciary is scrutinised by the public, acting both collectively and as individuals. This paper will outline examples of judicial engagement online and digital profiling. Ultimately, calling into question the suitability of the current prohibition of judicial blogging and micro-blogging under the Guide to Judicial Conduct.

***Child Pornography Crime on the Internet in the Legal System of Saudi Arabia***

Abdullah Bin Humaid

University of Dundee, Scotland

In recent years, crimes on the Internet have become an increasingly important issue for many countries including Saudi Arabia. There is no doubt that since the advent of the Internet, a major index of technological advancement, crime rates have risen in the world. The main problem of Internet crime is that the offenders in one state can commit crimes in other states, and this leads to issues about which country has jurisdiction to prosecute these crimes. The proliferation of technological devices (including phones and computers) implies that there may be multiple crime scenes. An important issue is that children can be victims on the Web, especially of child pornography. It is thus critical to take maximum legal precautions to prevent children from becoming victims of such offences, especially on the Internet. This paper will discuss the law of Saudi Arabia regarding child pornography as provided in the Cybercrime Act (2007). It will also examine substantive and procedural issues. Firstly, it will provide an overview of the relevant legal regimes and consider specific provisions of the law on child protection. In particular, an analysis of child pornography under Islamic law will be provided versus freedom of expression on the Internet. This paper will then consider the forms in which child pornography offences manifest such as making, distributing and possessing the material of child pornography, and the punishment for such offences. Finally, the pre-trial and trial procedures in child pornography an Internet crime will be examined.

***Judicial Integration of Technological Development in the Settlement of UNCLOS Disputes***

Ke Song

University of Edinburgh, Scotland

The role of UNCLOS dispute settlement mechanism in the settlement of law of the sea disputes and development of ocean orders cannot be ignored. Through the settlement of concrete cases, it serves as the engine of change, adapting UNCLOS to changing legal orders, and more importantly, to the newly technological development relating to the sea.

The paper focuses on the progress of judicial integration of technological development under the UNCLOS dispute settlement mechanism. In this regard, international courts and tribunals has used several interpretative tools when giving meanings to specific legal terms under UNCLOS, inter alia, the evolutive interpretation of “ordinary text”, systematic interpretation, teleological interpretation, etc,. These interpretative tools are reflected in a range of landmarking cases under UNCLOS dispute settlement mechanism, for example, *M/V Saiga*, *Virginia G*, *Arctic Sunrise Arbitration*, *South China Sea Arbitration,* and several prompt release cases. Considering the rapidly growing jurisprudence relating to judicial integration of technological development in the UNCLOS litigation, it is of necessity to distil the judicial process in order to provide cogent venues for subsequent judicial practice.

Yet, the current judicial practice is far from coherent in respect of the relative weight of technological elements in the process of judicial interpretation. In some situations, international courts and tribunals are seemingly reluctant to integrate technological considerations into jurisprudence without providing abundant reasons, while in other courts and tribunals are taking a rather proactive manner. In light of potential inconsistency and fragmentation, it is one of the main tasks for the international courts and tribunals to establish clear thresholds and set relevant hallmarks for the judicial integration of technological development, with a view to promoting the predictability and stability of the dispute settlement mechanisms.

***Religious Dress before the United Nations Human Rights***

Kaushik Paul

University of Durham, England

Bans on wearing religious clothing have generated widespread controversy in many societies including Europe. For instance, the regulation on wearing the Islamic headscarf has generated or served as a catalyst for wider debates concerning multiculturalism, individual group or national identity, Islamophobia, church-state relations, state neutrality, state secularism, immigration, the limits on religious freedom in a pluralist society, the privatisation of religion, tolerance, and collective rights. So, question of where to draw limitations on the right to manifest religion through the wearing of religious dress has become a burning issue. The United Nations Human Rights Committee, a body that monitors the implementation of the International Covenant on Civil and Political Rights, has played a significant role to address this question from the human rights point of view in the Optional Protocol cases. The purpose of this paper is to identify what approach the Human Rights Committee has taken with regard to restrictions on the right to manifest one’s religion or belief through the wearing religious dress.

***Regulating “Cryptoassets” Following the Scottish Tradition***

Israel Cedillo Lazcano

University of Edinburgh, Scotland

In his famous book, *An Inquiry into the Nature and Causes of the Wealth of Nations,* Adam Smith argued that sovereign intervention on monetary matters was necessary given that “*those exertions of the natural liberty of a few individuals, which might endanger the security of the whole society, are, and ought to be, restrained by the laws of all governments.”* Now, almost 250 years after the publication of the referred work, we are facing a similar scenario to the one that inspired Smith to write these lines. In our context, the Cambrian explosion related to the development of Distributed Ledger Technology (DLT), has fostered a model by which the total supply of all forms of “cryptoassets” is unlimited and, in most of the cases, unguaranteed. Given the experience with currency debasement as seen through the case *Gilbert v. Brett (The Case of Mixed Money)*, highlighted in different free banking periods, the proliferation of such private units issued by institutions that we could call “shadow banks,” should put us to think in an alternativel regulatory framework. With that in mind, we are proposing two approaches that are compatible between them. First, we think that central banks could issue sovereign cryptocurrencies through the development of a Proof-of-Authority protocol to process information and settle interbank payments within a permissioned network in which regulated institutions would act as nodes with access to our sovereign blockchain. Second, we would promote the creation of a “Crypto Charter” by which those intermediaries that desire to issue “cryptoassets” should back their instruments under conditions similar to those set in the Scottish and Northern Ireland Banknote Regulations 2009. To complement this measure, we could put in place a model of “unlimited” liabilities as found in cases, such as *Douglas, Heron, and Company v Alexander Hair*, the case that inspired Adam Smith.

**Keynote Address**

***Criminal Justice and Technology: what the recent past tells us about the near future***

Professor James Fraser

Criminal Justice and technology have an uneasy relationship. This seems likely to continue and perhaps become more troublesome. New technologies are developing at a faster and faster rate that are altering social behaviours and understandings. Some of these technologies are likely to have uses in the criminal justice process e.g. in the investigation of crime. This presentation reflects on recent “settled” technologies in areas such as forensic science and considers what they might tell us about the potential and risks from emerging technologies e.g. in biometrics.