SCIENCE, LAW AND ETHICS*

Advancements in the field of Science have provided unprecedented potential for improving the quality of life. Science and Technology have an influence – more invasive and more personal than ever before – on the lives of the human beings. The Science, opening new vistas in human lives and opportunities, is also posing new problems before the legal world for resolution. Baffling questions in the field of substantive and procedural law have already started surfacing for resolution. Thanks to the initiative taken by people without scruples, Science and Technology have also given birth to most complicated crimes and conflicts of interest between person and person and nation and nation. Obviously, law must step in to rule, govern and also to resolve.

Science without ethics can be disastrous. The birth of legal principles is founded on the tenets of ethics. Science, law and ethics have to come together to assign quality to the life of the people which is the common aim of Science and Law, both. It will be apposite to remember the fundamental duties, enjoined on us by Article 51A of the Constitution. We have to value and preserve the rich heritage of our composite culture. We all have to develop the scientific temper, humanism and spirit of inquiry and reform. We all have to strive towards excellence. There are advancements and innovations in the field of Science and Technology, and dynamism and innovations in the field of law, entwined with the fundamentals and basic of ethics which will decide, for future, the pace of development as also the quality and values of the society and whether we would have peace and prosperity or turmoil and destruction. The great scientist Albert Einstein had forewarned by saying – "Try not to become a man of success but rather to become a man of value."

The social impact of technology can indeed be enormous. We see, everyday, how life has changed after the advent of internet and computers. E-commerce and e-governance are no more distant dreams, but a living reality. The law and administration of justice have come to be related to Science and Technology in several ways.

Firstly, the legal system is, increasingly, becoming a major user or consumer of Science and Technology. With the adoption of scientific methods of investigation by the police, scientific evidence invariably forms part of the prosecution evidence. It is no more just an expert opinion which the judge can accept or disregard, at his discretion. It is corroborative evidence or sometimes even substantive evidence of high probative value. Look at DNA finger-printing which, scientists claim, can almost be conclusive proof of facts in issue in civil and criminal proceedings. Specialised and customised solutions are provided to many a problems, by Forensic Sciences and forensic laboratories, which otherwise consume so much of judicial time without corresponding benefits in evidence and proof.

Another area, where the judiciary is seeking to be a major consumer of Science and Technology, is in respect of Information Technology. The work of lawyers and judges now quite depends on their ability to access and process vast bodies of information on which judicial inferences are drawn on contested issues of fact and law. With the explosion in law and litigation, we find it hard to manage with traditional methods of information search. Law libraries are now available on-line. Legal research is made easy through digitalisation of data. With greater use of computerisation and digitalisation, litigants can expect more

expeditious and qualitatively superior services from lawyers and courts. Again with the development of appropriate software and extensive networks, the efficiency of the judicial system can increase significantly. Resources permitting, the judicial system is seeking to make this change possible, substantially, if not wholly, during this year, which is declared as the YEAR OF EXCELLENCE IN JUDICIARY.

Law and Science confront each other in a fundamental way, when the legal system interdicts Science in the matter of setting standards for the conduct of research, affecting public policy and human rights. Science without humanism can be dangerous. The products of scientific research can be put to beneficial as well as destructive uses. Look at our experience with the law on pre-natal sex selection tests and assisted reproductive technology. Or, the law relating to organ transplantation or clinical trials of drugs. When the regulatory bodies fail to maintain the standards, courts invariably step in which may not always be welcome to the scientific world. A large body of environmental jurisprudence has been built up, in the last two decades, by the courts.

In the above context, it is important that Science and Law should interact not only when conflicts arise but also to avoid such situations, wherever possible. Law should not inhibit scientific research. Let Law and Science be partners in sustainable development and social justice delivery in progress of society.

The message of future is written on the wall. While the scientists must agree that their creations shall abide by the rule of the law, the lawyers must equally agree to adopt a scientific temper. Greater the speed of Science, the higher is bound to be the intellectual and cultural level of men. All these, enhance the need for ethics to save the society from going berserk. What we used to read in Science fictions or view in Science films, is all coming true. Every next day there is a new discovery. It is not unrealistic to say that we are moving towards a new social order, dominated by Science and Technology. We need a new legal order to govern such a new social order. Neither Science nor Law should forget their roots, which lie in ethics, and their goals which too are in ethics.

It is this noble ideal, which this Colloquium of scientists and judges is attempting to explore. We are really fortunate that His Excellency, the President of the Republic, who himself is a distinguished Scientist, is present in our midst, through video-conferencing, to share his scientific wisdom with us. While we shape our legal instruments to deal with the challenges of Science and Technology, the rich and varied experience of a Science genius like Dr. A.P.J. Abdul Kalam, shared with us, will be of immense help to the entire legal community. Together, we will achieve the President's Dream of India-2020.

^{*} Speech delivered at the colloquium of scientists and High Court Judges at National Judicial Academy, Bhopal on 19th February, 2005.