

Advances in Science Education

Edited by

Hari Shankar Biswas

Sandeep Poddar

Amiya Bhaumik

Published by:

Lincoln Research and Publishing Limited, Australia

in collaboration with

Lincoln University College, Malaysia

CONTENTS	Pages
Preface	i-ii
Acknowledgement	iii
Importance of Science Education to Achieve Sustainable Society <i>Debarati Dey</i>	1-5
Experiential Learning : Analysis of Impact on Students About Literacy of Insect Conservation <i>Manish Kanti Biswas</i>	6-11
Interdisciplinary Education Trends in School and Higher Education: A Review <i>Shamba Chatterjee, Sucheta Das</i>	12-18
Problems of Science Education and Research <i>Madhu Kumari Gupta</i>	19-22
Action Research: Purposes, Principles, Practice and Evaluation <i>Jhimli Sengupta</i>	23-28
Free and Open Source Software as Powerful Tools in Teaching and Learning Science in the 21st Century <i>Ranjan Das</i>	29-39
Concept Mapping In Science Education <i>Lalita Das</i>	40-45
Understanding the History and Philosophy of Chemistry is the Cornerstone of Chemistry Education <i>Amrit Krishna Mitra</i>	46-51
Skill-based, Problem-based and Research-based Learning <i>Divya, Shivam Rai, Md. Nazrul Islam, Khurshid Anwar Khan, Tina Chakrabarty, Arnab Kanti Giri</i>	52-58
Science and Legal Knowledge with Special Reference to IPR <i>Shivam Rai, Divya, Tina Chakrabarty, Arnab Kanti Giri</i>	59-65
Innovations in Science Education with Special References to Chemical Sciences <i>Subhas Chanda Bhat</i>	66-70
Systems Thinking in Chemistry Education <i>Debolina Mitra</i>	71-76
The Role of Green Chemistry Education for Sustainable Development <i>Harisadhan Ghosh</i>	77-83
'Virtual Lab' is a Promising Supporting Tool to Teach Next-generation Science Aspirant <i>Amit Saha Roy</i>	84-89
Science Education: Nurturing an Interest and Sparking a Desire to Learn More <i>Madhushree Das Sarma</i>	90-98
ICT as a Powerful Tool in Education - An Overview <i>Subhadra Roy</i>	99-101
Participatory Learning Method as an Effective Tool of Learning for Students: A Case Study <i>Damayanti Bakra</i>	102-107
Issues and Challenges in Innovation in Science Education <i>Subhashis Bala, Hari Shankar Biswas</i>	108-111
Fruit Chromophore Selection for Reactive Modification of Plant Biopolymer Exudate and its UV-VIS Study <i>Soumya Mukherjee, Himadri Mullick</i>	112-117
Revolutionizing Science Education through Virtual Laboratories <i>Suchandra Chatterjee</i>	118-128

Science and Legal Knowledge with Special Reference to IPR

Shivam Rai¹, Divya², Tina Chakrabarty³, Arnab Kanti Giri^{4*}

¹Gautam Buddha University, Uttar Pradesh, India

²Aligarh Muslim University, Uttar Pradesh, India

³R & D, Tata Steel, Jamshedpur, Jharkhand, India

⁴Karim City College, Jamshedpur, Jharkhand, 831001, India

**Corresponding Author's Email: giri.arnabkanti54@gmail.com*

ABSTRACT

In general, to block competitors from entering the market space, whenever a company or an individual innovator discovers a commercially viable technology, the next step is to secure legal protection, which is not a minor task, as many innovators and companies realize. Due to the rise in the rate of discovery, as a direct consequence, legal freedom decreases. However, to take these legal steps for securing one's intellectual property, legal knowledge is a necessity and the knowledge of how to use their intellectual property rights which primarily belongs to the area of technological and scientific innovation. The protection of ideas and the written expression of ideas should concern all innovators as they regularly use laboratory manuals, copyrighted journals, trademarked and patented products. Acquiring the copyright and then transferring it to journals and book publishers are the norms, which every author has to follow. On the other hand, in their employment to their employer, Innovators and Scientists in academia or industry are generally required to transfer all inventions. The true success of Science, ironically, is limiting rather than extending its autonomy. The involvement of Science with various partners leads to claiming ownership rights by each of them to their intellectual property. Therefore, Legal knowledge of IP provides a solution to various conflicts and a policy framework that allows the transformation of intangible resources into sustainable development assets by promoting and protecting innovation and creativity, which will eventually help innovators cultivate Science fruitfully.

Keywords: *Science Policy; IPR; Intellectual Property; Legal Knowledge; Innovation; Technology*

INTRODUCTION

Science is similar to all other sapiens activities: a socially constructed phenomenon – the brainchild of our decision-making capability and mutually organized human labour that involves competition, debate, and struggle. The need to motivate inventors to bring novel and applicable products to the marketplace for the utility of all was recognized by society ahead of time and therefore, safeguarding and rewarding the innovator for his expensive, time-consuming, and valuable research, the protection against