

A
ST. XAVIER'S COLLEGE
PHYSICS DEPARTMENT ANNUAL PUBLICATION

NEW DIMENSION





Contents

S.No.	Title	Page No.
1	Raman Spectroscopy: Preamble, Prominence and Application	1
2	The Days' Play	3
3	Chaos Theory: A brief introduction	4
4	The premature state of "Topology" and "Graph Theory" nourished by "Seven bridges of Königsberg problem"	7
5	An introduction to continental drift	12
6	Gravitational waves	14
7	Impact of digital literacy on critical writing	16
8	Interview with Dr. Narayan Prasad Chapagain	18
9	Aurora: The polar lights	21
10	For the love of reading	23
11	An overview: Gorkha Nepal earthquake 2015	24
12	Solar radiation	26
13	Mountain waves and Implications	27
14	Solar storms	30
15	The car in the garage "Paradox"	33
16	Stress tensor and its applications	35
17	Transistor and its modern-day impact	38
18	Perverse debauch	39
19	Eternal brooding	39
20	An introduction to geomagnetic storms	40
21	Raman spectroscopy	43
22	A study on change in carbon to carbon transfer energy in carbon nanotubes and its electrical property	45

23	Atomic force microscopy	48
24	Gender and Physics	52
25	The art of argument	53
26	Active Galactic Nuclei	57
27	A brief review on dark matter	60
28	Virtual reality	63
29	Wormhole and time-travel	64
30	Density functional theory	66
31	Lightning and Thunderstorm	70
32	Zero point energy	72
33	Physics in the development of the country	74
34	Notion of forces - Explained but still obscured	75
35	Statistical mechanics: A brief introduction	78
36	Harry Potter and Physics	82
37	The Unheard Hero	84
38	Researcher profile	85
39	The phone booth	88
40	Class Group Photos	90
41	Photos for Memories	93