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Mohammad Hasan Shahid · Mohammad Ashraf · Falleh Al-Solamy · Yasunori Kimura · Gabriel Eduard Vilcu *Editors*

Differential Geometry, Algebra, and Analysis

ICDGAA 2016, New Delhi, India, November 15–17



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Preface

This book discusses recent developments and contemporary research in the area of differential geometry, algebra and analysis. It is divided into three parts: the first part contains articles from the discipline of differential geometry; second part presents contributions in algebra and its application; and the third part focuses on topics from analysis.

It is pertinent to mention that some of the included papers were presented at the International Conference on Differential Geometry, Algebra and Analysis (ICDGAA 2016), held at the Department of Mathematics, Jamia Millia Islamia, New Delhi, under the chairmanship of Prof. Abdul Wafi from 15 to 17 November 2016. Participants and speakers from across the country and globe—USA, France, Japan, Poland, Romania, Iran and Morocco—attended the conference and presented their research. The exchange of ideas in different fields formed the link for future collaboration across the world. The focal theme of the conference was to bring together senior and young researchers in the area of differential geometry, algebra and analysis to exchange new ideas and to discuss current challenging problems in mathematics. We are of the opinion that the work presented in this volume will be useful to researchers in these areas. Furthermore, we hope that the research articles given in this book will stimulate the formation of interdisciplinary groups for beneficial collaborative research.

Reviewed by renowned experts, chapters in the book are authored by renowned researchers working in these areas of mathematics. This book covers a wide range of topics such as geometry of submanifolds, geometry of statistical submanifolds, ring theory, module theory, optimization theory, approximation theory, etc., by exhibiting new ideas and methodology for current research in differential geometry, algebra and analysis. We are thankful to all the contributors, faculty members of the Department of the Mathematics, Jamia Millia Islamia and organizing secretaries Dr. Arshad Khan, Dr. Yahya Abbasi and Dr. Izharuddin for their co-operations. The conference was supported by DRS Department of Mathematics, Jamia Millia Islamia and DST, NBHM, and CSIR.

New Delhi, India Aligarh, India Jeddah, Saudi Arabia Chiba, Japan Ploiești, Romania Mohammad Hasan Shahid Mohammad Ashraf Falleh Al-Solamy Yasunori Kimura Gabriel Eduard Vilcu

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