Journal of Solid State Chemistry 297 (2021) 122068

Contents lists available at ScienceDirect

Journal of Solid State Chemistry

journal homepage: www.elsevier.com/locate/jssc

Preface

Advances in Materials Science: A special issue in honour of Prof CNR Rao

This special issue is in honor of Prof. Chintamani Nagesa Ramachandra Rao, known to the world as C. N. R. Rao, an exemplary scientist, a material scientist par excellence, and a pioneer in solid state chemistry. While there are many reasons to celebrate such an extraordinary person's contributions, enriching sciences, for more than six decades, this special issue is borne out of a symposium, ICMAT-von Hippel Symposium, that was organized within International Conference on Materials for Advanced Technologies (ICMAT 2019), Singapore to honor Prof. Rao on his receiving the prestigious von Hippel Award from Materials Research Society, USA. The von Hippel Award, the Materials Research Society's highest honor, recognizes those qualities most prized by materials scientists and engineers - brilliance and originality of intellect, combined with vision that transcends the boundaries of conventional scientific disciplines. It is worthwhile to note that Prof. Rao is the first Asian to have received this award. This Symposium was organized jointly by Materials Research Society of Singapore and Materials Research Society, USA and sponsored by Elsevier. Special thanks to Dr. Greeshma Nair of Elsevier for her support to the Symposium.

The idea of the symposium was to showcase the multifaceted, wide-spectrum contributions of Prof. Rao to materials chemistry and physics. Speakers in the symposium represented a small segment of those people whose life and work have been significantly influenced by Prof. Rao through his interactions with many generations of scientists and his prolific contributions. The special issue presented here on the following pages is based on articles contributed by a selection of speakers on topics of their talks in that symposium and provides the reader with a glimpse the variety of research fields that Prof. Rao has greatly influenced over the years. These cover topics as varied as energy research, solid-state chemistry, supramolecular chemistry, nanomaterials, quantum dots, nanotubes, two-dimensional materials, specifically graphene, carbonitrides, and borocarbonitrides, mesoporous materials, energy storage materials, transition metal oxides, photo(electro)chemical processes, catalytic properties, optical properties, structure-property relationship, and devices.

We feel honored to present you with this collection of articles to celebrate Prof. C. N. R. Rao's extraordinary contributions to solid state sciences and his receiving the von Hippel Award of MRS. We also wish Prof. Rao many more years of exciting science, benefiting the world with his far-reaching contributions.

D.D. Sarma*
Indian Institute of Science, Bangalore, India

B.V.R. Chowdari
Nanyang Technological University, Singapore
Materials Research Society of Singapore, Singapore
E-mail address: chowdari@ntu.edu.sg.

Sean J. Hearne, Mike Fitzsimmons
Oak Ridge National Laboratory, USA
E-mail addresses: hearnesj@ornl.gov (S.J. Hearne), fitzsimmons@ornl.gov (M. Fitzsimmons).

C. Jagadish
Australian National University, Australia
E-mail address: Chennupati.Jagadish@anu.edu.au.

* Corresponding author.
E-mail address: sarma@iisc.ac.in (D.D. Sarma).

https://doi.org/10.1016/j.jssc.2021.122068

Available online 16 February 2021