Erudite Scholar-in-Residence Lecture Series – K.S. Sajinkumar, Department of Geology, University of Kerala. (E: sajinks@gmail.com)

‘Erudite Scholar-in Residence’ program of the Kerala State Higher Education Council (KSHEC), Government of Kerala, is an innovative concept that aims at inviting Nobel Laureates and other distinguished scholars to the higher educational institutions in Kerala for providing avenues for students and researchers to interact and develop collaborations with leading scientists from abroad as well as from India. Department of Geology, University of Kerala, tapped this opportunity to the fullest during 2017-18 by inviting professionals of diverse backgrounds from across the globe, thereby opening a plethora of opportunities to the student community.

The inaugural Erudite Scholar-in Residence lecture series at Department of Geology, University of Kerala, was by Prof. Thomas Oommen of Michigan Technological University, USA from 18 to 21 September 2017. The important lectures he delivered were ‘State-of-the-art techniques in asset management and infrastructure monitoring’, ‘Drone: a new toy in the toolkit of engineering geology’, ‘Theoretical aspects of Interferometric SAR Technology’ and an interactive session with the students regarding the opportunities for higher studies in USA. His visit culminated with a MoU signed between University of Kerala and Michigan Technological University on several aspects including exchange program. Prof. Oommen also delivered talks at the College of Engineering, Trivandrum and the Indian Institute of Space Science and Technology, Trivandrum.

This was followed by a 5-day long lecture series by the renowned geochemist and geochronologist Prof. William M White, Cornell University, Ithaca, USA, from 9 to 13 October 2017. Prof. White needs no introduction. He is the author of several highly cited papers and books on ‘Geochemistry’ and ‘Isotope Geochemistry’ that have been adopted extensively worldwide as textbooks in geology courses, as well the newly released ‘Encyclopaedia of Geochemistry’. He delivered a public lecture on ‘What can we learn from geochemistry? A few highlights’. He also delivered several other intensive lectures on ‘Introduction to the Tools of Mantle Geochemistry (which provided a useful introduction to trace element geochemistry and radiogenic and stable isotope geochemistry), ‘Probing the Earth’s Deep Interior through Geochemistry (tools introduced in the first talk along with geophysics was used to describe the current view of the chemistry and structure of the mantle, along with some inferences about accretion history)’, ‘Deep mantle geochemistry, mantle plume, hotspots and the isotopic anomalies’, ‘REE and trace elements, Sm/Nd and Lu/Hf isotopes and continent evolution’ and ‘Sediment subduction vs sediment assimilation and magma genesis in the Lesser Antilles Island Arc’.

Prof. Nicholas T. Arndt of Université Grenoble Alpes, France, the third Erudite scholar of this series, delivered lectures and led very lively student debates from 25 November to 2 December 2017. Again, Prof. Arndt is the author of ‘Metals and society: An introduction to economic geology’ and ‘Komatiite’, as well as several ‘Geochemical

Perspectives’ issues. Apart from the lectures of broad and current interest viz., ‘The Archean: an introduction to the early history of Earth’, ‘Komatiites and what they tell us about conditions in the Archean mantle’, ‘Granites and formation of the continental crust’, Prof. Arndt conducted two debates: (1) Plate tectonics started around 3 Ga ago and (2) Morality of mining. Students honed their debating skills under Prof. Arndt’s perspicacious gaze, which proved to be a morale booster for the students.

The last in this series was by Prof. Franz-Josef Behr of Stuttgart University of Applied Sciences, Germany, from 5 to 10 March 2018. He is a professor of Spatial Information Processing with focus on Internet GIS, XML technologies, Data exchange and Interoperability, Visualization, Open Source Solutions, and Disaster Management. He is an active member of the German Organization for Standardization and Active Supporter of Open Source and Open Data. Prof. Behr delivered talks and lead hands-on sessions on (1) OGC Standards: its background, theory and practice. Web-Technologies, Basic Principles of WebServices and XML, XML-Namespaces, XML Schema. Standardisation: An overview. OGC: Who, why, what, basic principles. The process of Standardisation. Reading a Standard: Types of OGC documents. (2) OGC Specifications. Simple Feature for SQL, Data format GML, Example of CityGML, KML (other formats like GeorSS, GeoJSON). Catalogue Services (CSW). Location Services (Open LS). Sensor Web Enablement (SWE). Web Processing Service (WPS) (3) OSGeo labs and future of FOSS GIS (4) He also delivered a talk on the ‘Options of doing higher studies in Germany’.

The Erudite lecture series provided an opportunity to listen to eminent scholars, and to become acquainted with diverse teaching and learning styles.

(a) Prof Thomas Oommen interacting with the students (b) Prof Thirivikramji having deliberation with Prof White (c) Prof Arndt delivering lecture (d) Prof Behr demonstrating before the audience