

# Department of Geology Faculty of Science / University of Peradeniya



## About Me

I was graduated with B.Sc. honours in Geology from University of Peradeniya, and I joined the Department of Geology as an Assistant Lecturer in 1980. I received my M.Phil. from University of Peradeniya and was promoted to Senior Lecturer II in 1987. I had my first postgraduate training in isotope geology at the Institute for the Study of Earth's Interior (ISEI) of the Okayama University in Japan. I had my second training in isotope geology at Scottish Universities Research and Reactor Centre (SURRC) in Glasgow during the tenure of a Commonwealth Academic Staff Scholarship from 1994-1997 at University of Edinburgh in the U.K. I was promoted to Senior Lecturer I in 2004 and to Professor in 2017. I served as the Head of the Department of Geology from 2004 to 2010 and also as the Chairman of the Board of Study in Earth Sciences of the Postgraduate Institute of Science (PGIS) from 2004 to 2011. I was also a member of the Board of Management of the PGIS from 2004-2011 and 2014-2017. Since 2017 I have been serving as the Chairman of the Admissions and Ethical Practices Committee of the Institute of Geology, Sri Lanka. I was also the President of the Geological Society of Sri Lanka (GSSL) in 2006. I was awarded the Ananda Coomaraswamy Medal of the GSSL for the year 2015. My research interests lie in metamorphic petrology and isotope geology. I have developed the innovative idea of Isochron Translation, a process taking place in metamorphic rocks during isotopic resetting. In the light of this idea I have introduced a geological criterion to identify an isochron and calculate accurate isotopic ages. I am exploring the process for better understanding of isotopic systems in metamorphic rocks.

### **Higher Education Qualifications**

😁 MPhil

University of Peradeniya - Sri Lanka (1987) University of Peradeniya - Sri Lanka (1979)

BSc

# Awards, Scholarships, Memberships & Fellowships

Bember, Institute of Geology, Sri Lanka (IGSL)

Life member, Geological Society of Sri Lanka (GSSL)

AnandaCoomaraswamy Memorial Medal of the GSSL for 2015

# **Positions Held**

- Head, Department of Geology, University of Peradeniya
- Chairman, Board of Study in Earth Sciences of the Postgraduate Institute of Science
- Chairman, Board of Study of Faculty of Scienceof the Centre for Distance and Continuing Education (CDCE)
  - Chairman, Admissions and Ethical Practices Committee, Institute of Geology, Sri Lanka- (2018 to date)

## My Teachings

GL432: Isotope Geology

GL437: Seismology

#### **Research Interests (Research Fields/ Projects)**

Isotope Geology in earth evolution.

Metamorphic petrology of granulites.

Understanding the relationship between Petrogenesis, Isotopes and Structures

### **Ongoing Research and Projects**

#### 😫 Reality of Isotopic Dating

Investigating the truthfulness of known isotopic ages of ancient rocks and minerals using computer simulations by subjecting them to the geological histories suggested by others. If truthful, one should be able to reproduce present-day isotopic compositions of those materials on computer.

#### Isotopic Evolution of crustal and mantle materials

Developing better models to understand isotopic evolution of crustal and mantle material.

#### 'Truthful' Ages From Computer Simulations of Zircons

Simulation of natural zircon U-Pb data using computer to suggest alternatives to geological evolution

## **Key Publications**

Journal of the Geological Society of Sri Lanka - (2020)

Isochron Translation and a Geological Criterion to Declare an Isochron

Journal of Geological Society of Sri Lanka - (2015)

Isochron Translation, Mantle Mapping and Sri Lankan Model ages. Ananda Coomaraswamy Memorial Oration 2014

### Conferences



Nothing to show under this subheading !!!

### **My Publications**

Please goto the website.

https://sci.pdn.ac.lk/geology/staff/Rohana-Keerthi-Perera