

Dr. R. Someswaran, M. Tech., PhD.,

F3, Priyanka Homes, 3/29, 9th Cross street,
Mahalakshmi Nagar, Adambakkam, Chennai,
Tamilnadu, India.
+91-9706572154

rkomes@gmail.com



Courses Handled:

- Construction Techniques and Practices (3)
- Construction Materials (1)
- Geographic Information System (GIS) (2)
- Physics for Civil Engineering (1)
- Industrial Safety (2)
- Environmental Sciences & Sustainability (1)
- Solid & Hazardous Waste Management (1)

Relevant Courses / Lab:

- Fluid Mechanics
- Finite Element Method
- Hydrology
- Hydraulics Lab
- Remote Sensing

Software/Language:

- Fortran
- ArcGIS
- QGIS

Hobbies:

- Stamp Collection
- Reading Books
- Writing Blog

Personal Details:

DOB: January 28th, 1985

Nationality: Indian

Marital Status: Married

Languages Known:

Tamil, English and Hindi

EXPERIENCE: (12Y) 3Y Teaching & 9Y Research

March-2022 to Till date: Assistant Professor; [HoD /Civil (March 22-August 23)]
Mohamed Sathak A J College of Engineering, Siruseri, Chennai, Tamilnadu.

Jan-2020 to Apr-2021: Assistant Professor/Civil (1.3Years)
VSB Engineering College, Karur, Tamilnadu.

EDUCATION:

Ph.D. (Water Resources Engineering) (2010 – 2019)

Indian Institute of Technology Guwahati, Assam, India

M.Tech. (Remote Sensing & GIS) [9.37 CGPA / 86%] (2007 – 2009)

SRM Institute of Science and Technology, Kattankulathur.

M.Sc. (Physics) [8.35 CGPA / 72.4%] (2005 – 2007)

Bishop Heber College / Bharathidasan University, Tiruchirappalli.

B.Sc. (Physics) [70%] (2002 – 2005)

Vivekananda College / Madurai Kamaraj University, Madurai.

HSC (Maths, Physics, Chemistry & Computer science) [74.8%] (2002)

Tamilnadu State board (Tamil medium)

SSLC [77%], Tamilnadu State board (Tamil medium) (2000)

RESEARCH INTERESTS:

- Groundwater flow and Contaminant Transport Modelling,
- Applications of RS&GIS

ACHIEVEMENTS:

- Received “**Best Teacher award**” for the academic year 2022-2023.
- Got opportunity to **present research work** in the “**36th IAHR conference**” held in “**The Hague, the Netherlands**” during 28th June – 03rd July 2015.
- Got **MHRD Teaching Assistantship (TA)** during Jan-2010 to Dec-2015.
- Secured **2nd place** in the competition “**Technical Quiz**” in the National Level Symposium “**Geohorizon '09**” held at **Anna University**, Chennai during March 2009.

PATENT:

- Machine Learning based closed loop mixture of concrete equipment and the method-2023.
- Development of recycled tyre steel fibres concrete for sustainable construction-2023

EVENTS ORGANIZED:

- **Symposium – KONSTRUCTA- 2K22**, A Technical Symposium at Mohamed Sathak A.J. College of Engineering, 28 October 2022.
- **Idea Presentation – Inter Departmental competition**, Mohamed Sathak A.J. College of Engineering, 16 November 2022, 2023 and Feb 2024 on behalf of IIC.

GUEST LECTURE DELIVERED:

- “**Recent Trends in GIS**” Guest lecture organized by Agni College of Technology (Autonomous) Thalambur, Chennai on 18-10-2023.

PUBLICATIONS/CONFERENCES:

- **Someswaran R.**, Suresh M., Balakrishnan A., Ramesh G., and Subha L. (2024). "Microplastics and Its Harmful Effects on Humans -An Review". *Journal of Chemical Health Risks*, 14(1), pp 1055-1062. (ISSN:2251-6727)
- Senthil Kumar M., Kalyani G., Mahendran S., Joga Rao H., Gokulan R., **Someswaran R.**, Jenifa Latha C., and Palpandian M. (2021). "Treatment of RO Rejects Wastewater by Integrated Coagulation Cum Adsorption Process". *Polish Journal of Environmental Studies*, 30(5), pp 4031-4038. (DOI: 10.15244/pjoes/130274). (Scopus Journal)
- **Someswaran R.**, and Kartha S.A. (2020). "Reactive Transport of Ferrous ion in the Saturated/Unsaturated Porous Media under the Dual Porosity Flow: A Numerical Modeling Study". *e-Journal of Geohydrology*, 1(1), pp 71-74. (<http://inciah.org/index.php/journal/>)
- **Someswaran R.**, Kartha S.A. (2017). "Unsaturated Physical Non-equilibrium Contaminant Transport Modeling Using Modified FEMWATER". In: Saha A., Das D., Srivastava R., Panigrahi P., Muralidhar K. (eds) *Fluid Mechanics and Fluid Power – Contemporary Research. Lecture Notes in Mechanical Engineering*. Springer, New Delhi, pp 1163-1170. (Scopus Journal)
- **Someswaran, R.** and Kartha, S.A. (2019). "Reactive Transport of Ferrous ion in the Saturated/Unsaturated Porous Media under the Dual Porosity Flow: A Numerical Modeling Study". 8th International Groundwater Conference (IGWC 2019), Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, 21- 24 October 2019.
- **Someswaran, R.** and Kartha, S.A. (2017). "Analysis of Contaminant Transport in the Saturated Aquifer under the Condition of Heterogeneity and Non-equilibrium Mass Transfer". International Conference on Modeling of Environmental and Water Resources Systems, Harcourt Butler Technical University (HBTU), Kanpur, 24–26 March 2017.
- **Someswaran, R.** and Kartha, S.A. (2015). "Non-equilibrium reactive transport modeling of Acid Mine Drainage in subsurface water". 36th IAHR World Congress, The Hague, the Netherlands, 28 June – 03 July 2015. (Proceedings ISBN No:978-90-824846-0-1)
- **Someswaran, R.** and Kartha, S.A. (2014). "Unsaturated physical non-equilibrium contaminant transport modeling using modified FEMWATER". 5th International and 41st National Conference on Fluid Mechanics and Fluid Power (FMFP 2014), IIT Kanpur, 12-14 December 2014.
- **Someswaran, R.** and Kartha, S.A. (2013). "Reactive Solute Transport Modeling of Acid Mine Drainage to Unconfined Groundwater Aquifers". 40th International Association of Hydrogeologists Congress (IAH 2013), Perth Convention and Exhibition Centre, Perth, Australia, 15– 20 September 2013.
- **Someswaran, R.** and Shanmuharajan, M.B. and Mohamed Abdulla K (2023). "Experimental analysis and comparison of River water at Vennaru, Thiruvarur District". National Conference on Advances in Chemical and Environmental Science & Engineering, NIT Raipur, 01-02 December 2023.
- **Someswaran, R.** and Kartha, S.A. (2014). "Analysis of Effects of Heterogeneity on Transport of Acid Mine Drainage". National Conference on Water and its Sustainability in Mining and Other Environment: Vision 2050 (WSME 2014), ISM Dhanbad, 28-29 March 2014, pp. 299-307.

WORKSHOP/WEBINAR/COURSES/FDP/STTP/TRAINING

- Completed online Professional Development Course on "Waste Management and Resource Recovery" conducted by Thapar Institute of Engineering & Technology from January to June 2023.
- Participated in the 47th Edition of BRIDGE 2022 - Chennai (A High Impact Industry-Institute Interaction Event of India), organized by ICT Academy at Chennai Trade Centre, Chennai. (13th July 2022).
- Attended ATAL-Online FDP on GIS & Remote Sensing conducted by Goa University. (12 – 16 October 2020).
- Attended ATAL-Online FDP on Smart Cities conducted by Kumaraguru College of Technology. (19– 23, October 2020).
- Attended a webinar on "Domestic Wastewater Management" organized by Department of Civil Engineering, Hindustan College of Engineering & Technology Coimbatore. (4th May 2020).
- Attended NPTEL course on Electronic Waste Management – Issues and Challenges and received E- Certificate. (2019)
- Attended NPTEL course on Fluid Mechanics and received E-Certificate. (Aug-Oct 2019).
- Attended GIAN course on Moment Analysis for Contaminant Fate and Transport conducted by Indian Institute of Technology Kanpur. (20th-24th March 2018).
- Attended course on Application of GIS for Land Use and Planning conducted by Survey Training Institute, Uppal, Hyderabad. (14th May – 13th June 2008).

THESIS WORK:

- **Ph.D (Water Resources Engineering)**
Title: "Numerical Modelling of Non-equilibrium Reactive Transport in Acid Mine Drainage"
- **M.Tech (Remote Sensing & GIS)**
Title: "Identification of Ground water recharge zones in Hard rock terrain"

All the information given here are true to my best of the knowledge.

Date : 16/05/2024

Place: Chennai



(Dr R.Someswaran)