



POSTDOCTORAL FELLOW ADVERTISEMENT

REMOTE SENSING OF CHANGES IN COASTAL ECOSYSTEMS, TAMIL NADU, INDIA

A postdoctoral position is available from the 1st April 2019 in the GeoSMIT department, French Institute of Pondicherry, Pondicherry, India. The position offered will address the vulnerability of coastal ecosystems to a range of socio-economic pressures and physical processes typical of the Tamil Nadu coast facing the Bay of Bengal, as introduced in Muthusankar et al. (2018). Regions of Pichavaram mangroves and Kalivelli wetland will be focused on. Changes in the ecosystems themselves will be described in function of surrounding land cover and land use transformations. The work has to be carried out within the framework of the 'Coastal transformations and fishing community wellbeing - synthesized perspectives from India and Europe, FISHERCOAST' project, funded by the EU-India Platform for Social Sciences and Humanities (EqUIP) program. This is a ground-breaking interdisciplinary project involving research in social science, economy, ecology geography and remote sensing.

The position offers ample opportunity to the postdoctoral fellow for exposure to a rich European and Indian international scientific environment with several missions in Europe, international conference participation and close partnerships with local stakeholders, such as the National Center for Coastal Research (NCCR), Chennai and Tamil Nadu Universities. The work is based on a unique image dataset including time series of very high spatial resolution multispectral satellite images (see Proisy et al. 2018 and Viennois et al. 2016 for examples).

We seek to hire a young Indian researcher, holding a Ph. D. in remote sensing or equivalent, specialist in geosciences with demonstrated experience in spatial analysis of land use / land cover changes using remote sensing imagery or in the development of remote sensing methods for monitoring changes (of diverse nature) in (coastal) environments. Knowledge of remote-sensed signal physics and autonomy in data analysis (processing, statistics, modelling) using programming software (Matlab, R, C, C++, Java, etc.) are desirable. Candidate with prior work on remote sensing of coastal ecosystems, such as mangroves, are particularly welcome. We will consider only candidates who have several first-author publications in peer-reviewed journals.

Minimum Qualifications:

- PhD degree and Indian nationality
- At least two peer-reviewed international articles
- Proficiency in English and proved communication skills (verbal and written)
- Proficiency in programming for multisource data analysis
- Basic proficiency in any GIS software (ArcGIS, QGIS, etc.) and Remote Sensing Software (ERDAS, ENVI, etc.)

Job description

- Location: GEOSMIT Department, French Institute of Pondicherry, Pondicherry
- Starting date: Between 1st April – 1st July 2019, Full time position, 24 months, 1-year + 1-year fellowship contract
- 60 000 INR/Month

How to Apply

- **Before 15 February 2019 BY EMAIL AT muthusankar@ifpindia.org AND christophe.proisy@ifpindia.org**
- Candidates should apply by sending a single PDF file consisting of:
 1. A CV including a list of articles, which will distinguish peer-reviewed articles in international journal with impact factor > 1 from other articles, book/book chapters conference proceedings, oral communications. Any experience in project management and student supervision is to be mentioned especially when the scope is international.
 2. A document of 5 pages maximum summing up the research work carried out by the candidate during and after his PhD and the main scientific reasons why he is applying for this Postdoctoral fellow. This document can include graphs and should be meticulously structured, written and presented.
 3. The names and contact information of three persons of reference

Shortlisted candidates will receive the oral interview modalities to be planned in February 2019 at IFP. A slide presentation will be requested. Skype meeting may be envisaged for candidates based outside India.

References (click on the references below and ask for a private access to the articles):

- [Muthusankar, G., Proisy, C., et al. \(2018\). When socio-economic plans exacerbate vulnerability to physical coastal processes on the southeast coast of India. *Journal of Coastal Research*, 85, 1446 – 1450](#)
- [Proisy, C. et al. \(2018\). Monitoring mangrove forests after aquaculture abandonment using time series of very high spatial resolution satellite images: A case study from the Perancak estuary, Bali, Indonesia. *Marine Pollution Bulletin*, 131, 61-71](#)
- [Viennois, G., Proisy, C. et al. \(2016\). Multitemporal analysis of high spatial resolution satellite imagery for mangrove species mapping, Bali, Indonesia. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 9, 3680-3686](#)