



**Aquitaine –Karnataka collaboration  
Scientific Project for Pre-PhD student exchange**

**Scientific Proposal**

Project Title	“Development of high performance multifunctional graphene-polymer nanocomposite membrane for water processing”	
Scientific domain	Materials Science and Water Technology	
Summary (ca. 10 lines)	The main objective of the this proposal is to achieve a new generation of smart and low-fouling nanostructured membranes based on graphene-polymer nanocomposites to significantly enhance the performance of filtration, separation, and remediation of a broad variety of chemicals, heavy metal ions, organic matters, and living organisms in wastewater. It will be an economically and environmentally friendly matrix for water purification.	
Student profile wished	Material scientist with a good background in chemistry	
Supervisor Name	Dr. H.B. Muralidhara	
Supervisor @ & phone	@: hb.murali@gmail.com	Tel: +91-9739315239
Institute/laboratory/industry (full address)	Centre for Emerging Technologies Jain University, Jakkasandra (Post), Kanakapura (Taluk), Ramanagara (District), Karnataka State, INDIA Pin Code: 562112.	
Director Name Institute/laboratory/industry	Dr. Krishna Venkatesh	
Director Institute/laboratory/industry @ & phone	@: igit@rediffmail.com	Tel: +91-9845358417
Timing & duration for project (give approximate ranges)	Around 6 months at any time	
Selected Publications	H.B. Muralidhara et al., <i>Colloid and Interface Science</i> . 361 (2011) 270-277. H.B. Muralidhara et al., <i>Powder Technology</i> ., 246 (2013) 125– 136.	

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