



POSTDOCTORAL POSITION

Ref: 01-20-06

JOB DESCRIPTION

The Jean Monnet Excellence Center on Sustainability (ERASME) at University of Clermont Auvergne was established in 2018 and is coordinated by Dr Arnaud Diemer. ERASME is engaged in sustainability projects from an integrated, systemic perspective. The Center's activities cover multiple sustainability related topics and domains, including Biodiversity, Energy, Climate change, and Industrial ecology.

ERASME is now recruiting a postdoctoral researcher for conducting research on Urban dynamics, the Sustainable Development Goals (SDGs) and Modelling for Sustainable Cities. The postdoctoral position is for a fixed term of one year (and can be extended to two if the project is successfully evaluated at the end of the first year) and full time position (35 hours / week). The starting date for the position is September 7th 2020, at University of Clermont Auvergne (France). The research project will focus specifically on modelling and evaluating progress on the SDGs at the city level, using System Dynamics as method. The project is part of the broader ERASME Sustainable cities project (International Network of Michelin's Cities). The appointed postdoctoral researcher needs proven expertise and experience for fulfilling these following duties:

1/ **Research on System Dynamics Modelling** (75% of full time): The postdoctoral researcher will develop a model connecting the SDGs at the city level. A prototype (model) has to be finalised by February 2021, when it will be presented at the Conference of the INMC (International Network of Michelin Cities), Santiago de Queretaro (Mexico). The structural form of the model is the iSDGs model from Millennium Institute. To help understand the model, a national case study (for France) will be designed. For the future, this research activity could be extended by improving the model for cities in developing countries.

2/ **Project management** (10% of full time): The candidate will have to coordinate and facilitate collaboration between a group of cities involved in the INMC network. These cities are participating on the basis that they are interested in applying and using the iSDG model once the prototype is finalised.

3/ **Designing Website and News Letters** (5% of full time): The candidate will help develop online resources with the scientific coordinator of ERASME.

4/ **Teaching Activities** (5% of full time): Includes teaching in *System Dynamics Modelling*, *Research Methodology* and *Systems Thinking* courses at the Licence's level and engineering program (Mathematics and Modelling) The teaching activities do also include organizing and giving lectures at summer or winter schools held by ERASME.

5/ **Participating in the writing of proposals** (5% of full time): These proposals concern European/International Projects such as COST SDG 17 (European Network), LIFE (Climate change), the Jean Monnet Chair (Circular Economy and Renewable Energy), ITN Marie Curie on Integrated Assessment Models.

As ERASME is highly multidisciplinary, competence in more than one field and/or proof of successful scientific collaboration will be considered an advantage. The position will require both independent and collaborative scientific publishing (with other researchers of ERASME). For research design and scientific collaboration, the postdoctoral candidate will be connected to ERASME partners such as Clermont Metropole and the Millennium Institute, and will also be associated with the activities of CERDI (Center of Economic Studies and Researches on International Development).

The successful candidate must hold a doctoral degree in a relevant field (System dynamics, Economic Modelling, Sustainable Sciences). A previous postdoctoral experience does not exclude the applicant from consideration. The appointee must have:

- The ability to conduct independent scientific research, and possess teaching skills
- Excellent analytical and methodological skills
- Proven capability to publish in high-impact scientific journals
- Experience working with System Dynamics Software (VENSIM or STELLA Software)
- The ability to work both independently and collaboratively as part of a multidisciplinary scientific team
- Experience in project / network management
- Excellent skills in written and oral English (skills in French or German are welcomed)
- Good knowledge of the iSDG Model
- Teaching experience

ERASME is located in Polytech (Campus des Cézeaux, Aubière). The city of Clermont-Ferrand (closer to Aubière) is at the middle of France (Auvergne Area), with 300 000 residents and 40 000 students. Clermont-Ferrand is one of the leading cities in France where the quality of life has been considered as “High Quality” by the magazine “l'Etudiant”. The salary for the position is about 45 000 euros per year.

The application should consist of the following documents (in English):

- (1) CV (max. 3 pages) and a list of relevant publications
- (2) Contact information for two referees
- (3) A research statement (max. 1000 words) consisting of a brief description of previous research experience

The application should to be sent to Arnaud Diemer (arnaud.diemer@uca.fr). The deadline for applications is July 10th.

Job Details

Title	Postdoctoral Researcher, ERASME
Employer	University of Clermont Auvergne
Job location	Polytech, 2 avenue Blaise Pascal, 63100 Aubière
Published	June 15th
Deadline	July 10th
Job type	Postdoc
Area of research:	System Dynamics, Economic Modelling, Scenario Planning



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