Position: Science Associate Linear Programming & Modelling Expert	**Start**: April 2020
	Application deadline: 24th February
	Type of contract: Open-ended

Concawe is looking for a Science Associate to perform LP modelling studies in support of its oil refinery research.

Who are we?

Concawe is the science division of an international non-profit association (European Petroleum Refiners Association aisbl) whose mission is to provide research & technical support to the EU downstream oil refining industry. The areas of study are environmental, health, safety and testing issues relating to the refining of crude oil and the distribution & use of petroleum products. The aim is to improve the understanding of these issues by the industry, authorities, users and other interested parties.

The Association represents the interests of 40 private Companies operating petroleum refineries in the EU. Members account for almost 100% of EU petroleum refining capacity and more than 75% of EU motor fuel retail sales. In addition, Concawe undertakes a wide variety of research in partnership with universities, research institutes and expert consultants. These research projects are developed to better understand the implications of proposed changes in EU legislation ("Vision 2050" reducing Green House Gas Emissions, Circular economy, Urban Air quality, etc.), controls on water use & emissions, and the fate & effects of substances used & produced by the sector.

What do we offer?

- Individual Training program, technology and professional skills development
- Responsibility and autonomy in your area of expertise
- A global view and concrete involvement on industry and societal challenges
- International and dynamic multicultural environment
- Competitive package complemented with fringe benefits

What do we expect from you?

The role of the Science Associate for Linear Programming & Modelling (LP&M SA) includes input to specific data analysis and programming activities (as detailed underneath) in support of Concawe's Refinery Technology Science Executive. Linear Programming expertise and ability to lead technical studies are key to this Science Associate position. The work is directly linked to Concawe's Refining Research activities and to a lesser extent, to the Refining Industry's role in achieving Europe's Greenhouse gases emission reduction (Concawe's Low Carbon Pathways Research and Air Quality).

General Duties and responsibilities

The LP&M SA is working in close connection with representatives of Concawe's member companies, who participate in evaluating and leading the scientific works.

- Budget: work programs from 50 to 200 k€/year
- Team: inter-action with other Sciences executives and Associates, working on other studies (mainly Fuels Emission, Low Carbon Pathways, Air Quality)
- Leadership: pro-active coordination of Refining Modelling and Linear Programming activities, meetings and works
- External representation: upon request (conference, presenting technical results and activities)
- Strategic decisions: is an active participant to the vision and strategy for its activities and active contributor to the Association strategic project activities
- As part of a team in the Science division of the Association, the main role is to initiate, develop and implement the yearly working plan for its activities while managing and optimizing the approved budget.
- LP&M SA will work in the area of Refinery Modelling, Energy, data analytics and treatment, models and software management. In his/her area of expertise, he/she will participate in the work of different working groups of the Association.
- He/she will report to the Refining Technology Science Executive (SE) and provide him with regular activity reports. Depending on the project, direct link may be required with other SE's such as Fuels & Emissions or Economics & Modelling

- He/she will participate and lead as required (in coordination with his/her line manager) in the groups meetings (face to face or conference call) linked to his/her projects. During these meetings, he/she will explain works & results, and take actions as recommended by the Group. Feedback to the Management Groups may be required to bring his/her expertise at the upper level of the Concawe organisation, to be done upon demand from the relevant Science Executive.
- He/she will develop an in-depth knowledge of the European and global technical issues related to the transition to a low emissions future of the transport sector.
- In addition to the targeted activities described above, it can be expected, that the Science Associate will be involved in related technical and cross-disciplinary projects including organization of and analysis/reporting of market survey data, analysis of Demand data.

What is your professional profile?

- **Education & Experience**
  - Relevant postgraduate qualification or PhD
  - A science/engineering/IT background and a proven track record of **at least 4 years' experience in Linear Programming**
  - Experience in the energy sector (Oil refining industry, consulting firms, and Research institute or similar)
  - Excellent computer skills, software and experience with XLS-based models and data analysis
  - Capacity to quickly learn and understand the oil Industry issues and oil refinery optimisation
- **Skills & Competencies**
  - Project management skills and ability to meet deadlines
  - Keen interest and awareness of the European institutions decision-making processes for technical issues
  - Good communication skills, both verbal and written in English, combined with negotiation skills and a sense of diplomacy. Regular and direct communication with Member Company and external experts; written documentation of results will be an expectation of this project
  - Ability to think strategically and put technical issues in a broader context
  - A team player with the capacity to facilitate efficiently the works within technical teams.
  - Self-starter and autonomous in his/her work
  - Good command of the English language; an additional language would be an advantage
- **Knowledge**
  - Expert knowledge of refinery modelling techniques, especially linear programming (LP), including a thorough understanding of their input data requirements, the analysis and correct interpretation of their output data and their typical strengths and weaknesses.
  - Expert knowledge of refining processes, awareness of developments in the field of process and catalyst technologies and a demonstrated knowledge in one or more specific fields related to this area.
  - A broad knowledge of refinery CO_2 emissions and their relationship to factors such as refinery configuration and energy efficiency, and the applicable EU legislation.
  - A sound understanding of the economic factors driving refinery operations and capital investments, including input crude costs, refining costs and product values relative to refinery configuration.
  - An awareness of current issues relevant to the competitiveness of the European oil refining industry, such as product supply/demand balances, product quality specifications, penetration of alternative fuels, regulatory burdens and expansion projects in refineries in Europe and in competing regions.
  - Understanding of air quality dispersion and integrated assessment modelling would be a plus

What is your report line? Science Executive for Refinery Technology

To apply, please send your CV and motivation letter to: recruitment@concawe.eu
mentioning " Concawe Science Associate Linear Programming & Modelling Expert" in the subject of your e-mail.

By applying for this vacancy, you agree that we use your personal data for recruitment purposes only.
All your private information will be deleted from our files after the recruitment process.