

**Jobbnorge-ID:** 133335

**Søknadsfrist:** Closed

**Nettside:**

**Omfang:**

**Varighet:**

## PhD in Enhance visible light adsorption for TiO<sub>2</sub> based catalysts for photocatalytic H<sub>2</sub> production

A PhD position is available at the Department of Chemical Engineering. The appointment has a duration of 3 years with the possibility of until 1 year extension with 25% teaching duties in agreement with the department. (To undertake the teaching duties it is a requirement that the candidate speaks Norwegian or another Scandinavian language). The position is financed by NTNU.

### Information about the department

The current research fields at the Department includes biorefinery and fiber technology, catalysis, colloid and polymer chemistry, environmental engineering and reactor technology and process systems engineering. Information about the department is available on the Departments homepage: <http://www.ntnu.edu/chemeng>. Information about the research group can be found at: <http://www.ntnu.edu/chemeng/research/catalysis>.

### Job description

This project involves harvesting sunlight for H<sub>2</sub> production by either biomass reforming or water splitting. The primary objective of this project is to develop TiO<sub>2</sub> based catalysts for visible light photocatalytic H<sub>2</sub> production. The main research activities include material synthesis, characterization and testing in photocatalytic reactor. We are seeking a person with good understanding heterogeneous catalytic materials (semiconductor, bimetallic, metal-oxide system) and catalytic reactions.

Detailed information on our PhD programs is found at: <http://www.ntnu.edu/nt/research/phd>

### Qualifications

The applicant must have an MSc (or equivalent) in materials science, chemistry, chemical engineering. Experimental skills and experience in material synthesis and characterization are required. Candidates with experience in photocatalysis, electrochemistry, and photoelectrochemistry in particular, will be preferred.

The successful candidate should be creative, with a strong ability to work problem oriented. He/she should also enjoy interdisciplinary research and take keen interest in learning and working in teams. He/she will need both work independently and cooperate with other PhD students

The regulations for PhD programmes at NTNU state that a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale of A-E for passing grades (A best). Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree: [http://ec.europa.eu/education/tools/diploma-supplement\\_en.htm](http://ec.europa.eu/education/tools/diploma-supplement_en.htm)

The position requires spoken and written fluency in the English language.

### Terms of employment

The appointment of the PhD fellows will be made according to Norwegian guidelines for universities and university colleges and to the general regulations regarding university employees. Applicants must agree to participate in organized doctoral study programs within the period of the appointment and have to be qualified for the PhD-study.

NTNU's personnel policy objective is that the staff must reflect the composition of the population to the greatest possible extent.

The position as PhD is remunerated according to the Norwegian State salary scale. There is a 2% deduction for superannuation contribution.

Further information can be obtained from associate professor Jia Yang, E-mail: [jia.yang@ntnu.no](mailto:jia.yang@ntnu.no)

### The application

Applications with CV, certificates from both Bachelor and Master, possible publications and other scientific works, copies of transcripts, (copies of documentation on English language proficiency test) and reference letters should be submitted.

Applications must be submitted electronically through [www.jobbnorge.no](http://www.jobbnorge.no)

Applications submitted elsewhere will not be considered.

The reference number of the position is: NV- 15/17

**Application deadline: 4. March 2017**

### Tilleggsinformasjon

### Arbeidssted: