



WORK OFFER

Ref. No. AT-2020-6006VI

Employer Information

Employer: Cest Kompetenzzentrum für elektrochemische
Oberflächentechnologie GmbH
Viktor-Kaplan-Str. 2
2700 Wiener Neustadt
Austria

Website: <http://www.cest.at/>

Location of placement: Wiener Neustadt
Nearest airport: Vienna
Working hours per week: 38.5
Working hours per day: 8.0

Number of employees: 40

Business or products: Chemistry

Student Required

General Discipline: 40C-CHEMISTRY, MATERIAL SCIENCE, AND
CHEMICAL ENGINEERING

Completed years of study: 2

Field of Study:

Student status requirements: required when nominated

Language required: English Excellent

Required Knowledge and Experiences:

Physical and Electrochemistry (Electrochemical measurement techniques, corrosion and corrosion protection), Organic Chemistry (basic skills in synthesis of materials), Materials Science (important electrical, mechanical, thermal characteristics of materials). Practical experience in chemical laboratory, good feeling of materials and their properties, understanding of safety aspects. Experience with Microsoft Office (Word, Excel, PowerPoint), plotting and interpretation of data.

Other requirements:

Communication skills
Teamwork
Problem solving skills
Time management
Responsibility

Work Offered

In the scope of the internship graphene based materials (GRM) should be synthesized, and chemically modified in order to be adopted to different applications, eg, functional coatings for the automobile and aeronautical industry. The synthesis will be carried out by electrochemical methods, for the modification electrochemical and organic chemical techniques are also conceivable. The practical tasks also include the characterization of the received materials by different analytical techniques, eg Raman and Infrared spectroscopy, simple chemical analytical methods. In the second part of the practical work the application of the GRM asin coatings for different substrates (steel, aluminum, standard toughened epoxy polymer etc.) will be carried out. The fabricated samples should then be widely investigated: electrochemical methods (impedance spectroscopy, potentiodynamic scan, cyclic voltammetry etc.) to evaluate various material characteristics Mechanical and standard technical testing should be also carried out. In addition to the practical tasks, the intern should be able to interpret the results (plotting of data, calculation), to summarize them in form of presentations/reports and to communicate them to the supervisor project leader. A strong onboarding process at the beginning, and a continuous supervising will help the applicant to get adjusted quickly and smoothly to the topic and the tasks.

Number of weeks offered: 4 - 6

Within the months: 01-JUL-2020 - 22-DEC-2020

Or within: -

Company closed within: -

Working environment: Research and development

Gross pay: 1000 EUR / Month

Deduction to be expected: approx. 20%

Payment method / time of first payment: Bank Transfer /

Latest possible start date:

Accommodation

Canteen at work: No

Expected type of accommodation: Student dormitory

Accommodation will be arranged by: Trainee with assistance of IAESTE

Estimated cost of lodging: 450 EUR / Month

Estimated cost of living incl. lodging: 750 EUR / Month

Additional Information

Informational talk by IAESTE and/or employer.

Nomination Information

Deadline for nomination: 01-MAR-2020

Date: 31-JAN-2020

On behalf of receiving country:

Mark Feichtinger