

This is a great opportunity to make a change

This is the first contest where 3D printing is specifically applied to chemistry & chemical engineering. We believe that 3D printing will change the way we do chemistry in the future. You can help us build that vision and you can transform yourself into the first 21st century new alchemist.

Our Jury will be composed by a panel of reputed academics and industrials from different countries.

They will judge your design based on several criteria, including: design, creativity, feasibility, industrial and / or academic (teaching) applicability and safety.

The winners will have a prize.

PRINT CREDIT

THE CONTEST

- Important deadlines -

Registration and
submission of files:

May 31, 2018

Prize Award:

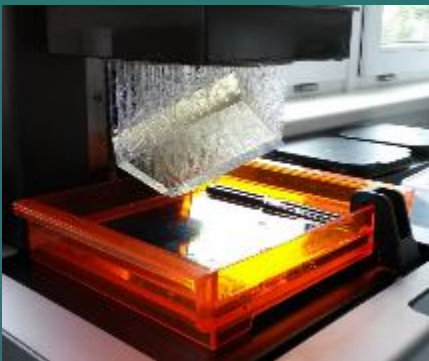
June, 2018



- Contact -

In case of questions,
please contact Printcr3dit
organization:

Printcr3dit@gmail.com



Presentation & goals

This European contest gives students and young researchers the opportunity to design and manufacture a chemical reactor that can be 3D printed and works for a simple and safe reaction. The most creative and educational reactor will be awarded.

The contest comes from the initiative of PRINTCR3DIT European H2020 Project consortium (www.printcr3dit.eu) and aims at:

- introducing the concept of 3D printing to chemical engineering education,
- showing that 3D printing disruptive technologies can result in a new way of thinking the design of chemical reactors thus enhancing their capabilities (considering size, speed of chemical reactions...).

What you need to do?

Identify a reaction and make it work in a 3D printed reactor or using a 3D printed catalyst.

Present a document with a maximum size of 2 pages with rationale, description, construction and operation (including safety). Describe the contribution of individual members of your team.

Make a Youtube video (max 5 minutes) demonstrating that your reactor works. The video can be in your native language but always include English subtitles (even in the ones spoken in English).

Participation rules

The full list of rules is available in our webpage:

<http://www.sintef.no/projectweb/printcr3dit/challenge>.

A short summary:

- Contest is opened in 2 categories: high-school and post-high school
- Maximum number of people per team should be 4; gender balance is advised.
- Each student or team may submit only one design.
- By entering this competition, you warrant that the work is your original work.
- Neither the work nor its use infringes the intellectual property rights of any other person.
- Contestants are not entitled to any compensation or reimbursement for any costs.
- The contestants should choose a chemical reaction and design the reactor or the catalyst.
- We will not evaluate demonstrations that use dangerous or toxic reactions.
- An example of stl file reactor could be downloaded on our webpage <http://www.sintef.no/projectweb/printcr3dit/challenge>
- You can use any 3D printing technology you want or have available.
- Choice of materials is left to contestants but should fit the chemical reaction considered.