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Newsflash

Issue

«Vienna Declaration» demands adjustment of REACH by 2020

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Geckoinspired multipurpose gripper

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"SimplyNano 2": Secondary school in Frauenfeld receives 20 "SimplyNano 2"experiment al kits

Internship

"Emerging

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Nanotechnolo

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Dear Sir or Madam

Welcome to our July newsflash of the Innovation Society, St. Gallen with the following News:

- «Vienna Declaration» demands adjustment of REACH by 2020
- Nano silica in foodstuffs could cause gastrointenstinal inflammation - Reduction required
- Gecko-inspired multipurpose gripper
- Graphene oxide shows developmental toxicity in fish embryos
- "SimplyNano 2": Secondary school in Frauenfeld receives 20 "SimplyNano 2"experimental kits
- Internship "Emerging Risks / Nanotechnology"

Enjoy the reading and kind regards,

Christoph Meili

The Innovation Society, St. Gallen

«Vienna Declaration» demands adjustment of REACH by 2020



During the 11th International Nano-Authorities-Dialogue in March of 2017, the "Vienna Declaration" was adopted by the German-speaking delegations of authorities. As a consequence and recommendation, the conference demands the nano-specific adaptation of REACH by the year 2020. The declaration was submitted to the general secretary of the European council (Environment) and discussed as information in the meeting on June 19.

Nano silica in foodstuffs could cause gastrointenstinal inflammation - Reduction required



The anti-caking agent silica E551 has been used for many years in the food industry as well as in toothpaste. Hanspeter Nägeli (UZH) and his team demonstrated that silica nanoparticles, which were previously regarded as harmless, may cause inflammation of the gastrointestinal tract.

Gecko-inspired multipurpose gripper



Robots generally need a gripper that adapts to three-dimensional surfaces. Such a gripper needs to be soft to adapt to a great variety of geometries, but not too soft, as it will detach easily and not be able to bear weight for very long.

Researchers working with Metin Sitti at the Max Planck Institute for Intelligent Systems in Stuttgart developed a membrane equipped with microscopic fibres inspired by the fine hairs on a gecko's foot and attached it to a suction cup-like flexible body. An internal pressure differential ensures perfect conformation of the flexible gripper to a wide variety of surfaces and equally distributes the load over the entire contact interface.

Graphene oxide shows developmental toxicity in fish embryos



The risks of Graphene oxide (GO) for human health and the environment are investigated with high priority, due to its tremendous potential applications in several industries. Researchers found that GO shows developmental toxicity for fish embryos at trace concentrations.

Secondary school in Frauenfeld receives 20 "SimplyNano 2" experimental kits



On June 14, the first "SimplyNano 2" course took place at Baumer Electric AG. The company funded 20 experimenting kits and a course for secondary teachers. Thus, Frauenfeld is the first school community in Switzerland, which, in cooperation with a company, equips its school with the new nano-experimenting kits. Gerold Eger, member of BAUMER AG's management, stressed that the company would also actively support the promotion of MINT subjects at school. Students in the whole country will soon benefit from exciting nano-experiments if this can serve as a successful example.

Media response

Internship "Emerging Risks/Nanotechnology"



We are looking for an intern to join our team in St. Gallen.

Find the job opening **here** (German only)

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