Curriculum Vitae

Personal information

Guangchao Chen

Work experience

1. Employer: National Institute for Public Health and the Environment
   - Start date: 042019
   - End date:
   - Position: Biostatistician
   - Activities: Focus on the analysis of dose_response relationship and Benchmark dose (BMD) modeling, with the use of the PROAST package developed by RIVM. Work also involves probabilistic risk assessment of chemicals
   - Country: Netherlands
2. Employer: Radboud University
   - Start date: 022018
   - End date: 022019
   - Position: Postdoctoral researcher
   - Activities: Responsible for assisting the implementation of QSAR models into an exposure evaluation framework of pharmaceuticals in Europe; developed models for the biodegradation of chemicals in sewage treatment plants; coordinating between research groups; dissemination of outcomes including attending conferences and presenting; supervising students
   - Country: Netherlands
3. Employer: Leiden University
   - Start date: 092013
   - End date: 092017
   - Position: PhD candidate
   - Activities: Study focused on statistical modeling for the hazard assessment of metallic nanomaterials, including literature review on the toxicity of nanomaterials, development of relevant database for modeling, developing (Q)SARs for nanotoxicity, and deriving species sensitivity distributions serving the purposes of generic risk assessment of nanomaterials
   - Country: Netherlands

Education and training

1. Subject: Vrije University Amsterdam
   - Start date: 092019
   - End date: 122020
   - Qualification: Mathematics
   - Organisation: Mathematics courses include Linear Algebra, Probability Theory, and Statistics
   - Country: Netherlands
2. Subject: Dalian University of Technology
   - Start date: 092010
   - End date: 062013
   - Qualification: Master degree
   - Organisation: Majored in computational chemistry, developed (Q)SARs classifying the biodegradability of organic chemicals
   - Country: China
3. Subject: Dalian University of Technology
   - Start date: 092006
   - End date: 062010
   - Qualification: Bachelor degree
   - Organisation: Majored in environmental chemistry and toxicology, joined the Undergraduate Innovation Program of bachelor student (topic: Applying fuzzy clustering method in predicting the combined toxicity of organic chemicals based on chemical structures)
   - Country: China

Additional information

Publications

Nolte TM, Chen G, van Schayk CS, Pinto_Gil K, Hendriks AJ, Peijnenburg WJGM, Ragas AM. Disentanglement of the chemical, physical, and biological processes aids the development of quantitative structure_biodegradation relationships for aerobic wastewater treatment. Science of The Total Environment. 708:133863. Chen G. The use of computational toxicology in hazard assessment of engineered nanomaterials. Ph.D. dissertation. 2017. ISBN 9789461828231. Chen G, Vijver MG, Xiao Y, Peijnenburg WJ. A Review of Recent Advances towards the Development of (Quantitative) Structure_Activity Relationships for Metallic Nanomaterials. Materials. 2017, 10(9):1013. Peijnenburg WJ, Chen G, Vijver MG. Nano_QSAR for environmental hazard assessment: turning challenges into opportunities. A. Gajewicz and T. Puzyn (Eds.). Computational Nanotoxicology: Challenges, pitfalls and perspectives. Pan Stanford Publishing. 2019. Xiao Y, Peijnenburg WJ, Chen G, Vijver MG. Impact of water chemistry on the particle_specific toxicity of copper nanoparticles to Daphnia magna. Science of the Total Environment. 2018, 610–611:1329–1335. Chen G, Peijnenburg WJ, Xiao Y, Vijver MG. Current Knowledge on the Use of Computational Toxicology in Hazard Assessment of Metallic Engineered Nanomaterials. International Journal of Molecular Sciences, 2017, 18(7):1504. Chen G, Peijnenburg WJ, Xiao Y, Vijver MG. Developing species sensitivity distributions for metallic nanomaterials considering the characteristics of nanomaterials, experimental conditions, and different types of endpoints. Food and Chemical Toxicology, 2017. doi: 10.1016/j.fct.2017.04.003. Xiao Y, Peijnenburg WJ, Chen G, Vijver MG. Toxicity of copper nanoparticles to Daphnia magna under different exposure conditions. Science of the Total Environment.2016, 563_564:81_8. Hua J, Vijver MG, Chen G, Richardson MK, Peijnenburg WJ. Dose metrics assessment for differently shaped and sized metal_based nanoparticles.

Environmental Toxicology and Chemistry. 2016, 35(10):2466_2473. Chen G, Peijnenburg WJ, Kovalishyn V, Vijver MG. Development of nanostructure–activity relationships assisting the nanomaterial hazard categorization for risk assessment and regulatory decision_making. RSC Advances. 2016, 6:52227_52235. Chen G, Vijver MG, Peijnenburg WJ. Summary and analysis of the currently existing literature data on metal_based nanoparticles published for selected aquatic organisms: Applicability for toxicity prediction by (Q)SARs. Alternatives to Laboratory Animals. 2015, 43(4):221_40. Xiao Y, Vijver MG, Chen G, Peijnenburg WJ. Toxicity and accumulation of Cu and ZnO nanoparticles in Daphnia magna. Environmental Science & Technology. 2015, 49(7):4657_64. Chen G, Li X, Chen J, Zhang YN, Peijnenburg WJ. Comparative study of biodegradability prediction of chemicals using decision trees, functional trees, and logistic regression. Environmental Toxicology and Chemistry. 2014, 33(12):2688_93. Li X, Chen G, Chen J, Qiao X. Logistic regression method for predicting the biodegradability of organic chemicals. Patent publication number CN 103345544 B.

Projects

Memberships

Other Relevant Information