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DALIAN UNIVERSITY OF TECHNOLOGY

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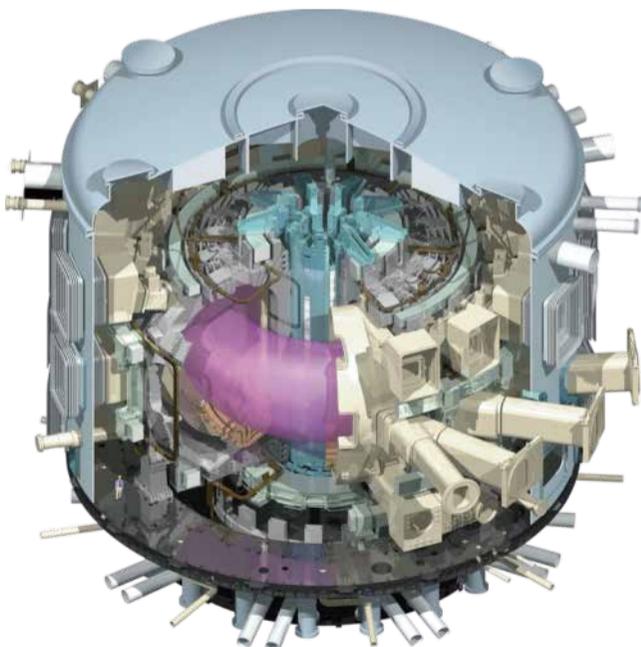
Wang Feng: First Chinese Scientist Joined Physical Simulation Team of ITER Organization

Source: School of Physics

Wang Feng, an associate professor at the School of Physics of Dalian University of Technology (DUT), has officially joined Physical Simulation Team of ITER Organization after a competitive selection process and begun to work on the developing of the integrated modeling platform. It's reported that he is the first Chinese to join the team.

The ITER Project is currently the biggest international "big science" engineering project. DUT has established the partnership with ITER organization to conduct in-depth exchanges and cooperation in magnetic confinement fusion. To undertake the mission of platform building in this project will provide key technologies to the establishment of China Fusion Engineering Testing Reactor (CFETR), which is of great importance in solving energy crisis for mankind.

Wang Feng is a young scientist at the School of Physics, core member of the team led by Prof. Wang Zhengxiong, Chief Scientist of the National ITER Project, and has been working on the research of large-scale numerical simulation for nuclear fusion plasma. He was once engaged in program development research at Princeton Plasma Physics Laboratory (PPPL) for 4 years, and has made many contributions to the development of Tokamak numerical simulation software with independent intellectual property rights in China.



LGA-2019-A-51




**AGREEMENT
ON
ACADEMIC, TECHNICAL AND SCIENTIFIC COOPERATION**

Between
DALIAN UNIVERSITY OF TECHNOLOGY (DUT)
and
THE ITER INTERNATIONAL FUSION ENERGY ORGANIZATION

Hereinafter referred to collectively as "the Parties" and individually as the "Party"



IMPLEMENTING AGREEMENT

No. 065/2019/IPA/DUT
6200000065

between
ITER Organization
and
DALIAN UNIVERSITY OF TECHNOLOGY - DUT
and
Chinese Domestic Agency

Human Resources Department



Route de Vison-sur-Verdon - CS 90 046 - 13067 St Paul Les Durances Cedex - France

Mr. Feng WANG
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No.2 Linggong Road, Dalian, Liaoning 116024
P.R. of China

St. Paul-Lez-Durance, 17 December 2019

Reference: IO/2019/HR/345

Subject: Invitation Letter with reference to IPA arrangement for Mr. Feng WANG
IPA/2019/037/SCOD: Associate for development of the Integrated Modelling and Analysis Suite (IMAS)



New Publication on Methylsiloxanes in ES&T

Source: School of Environmental Science and Technology

ENVIRONMENTAL
Science & Technology

pubs.acs.org/est

Article

Formation of Low-Volatile Products and Unexpected High Formaldehyde Yield from the Atmospheric Oxidation of Methylsiloxanes

Zihao Fu, Hong-Bin Xie,* Jonas Elm, Xirui Guo, Zhiqiang Fu, and Jingwen Chen

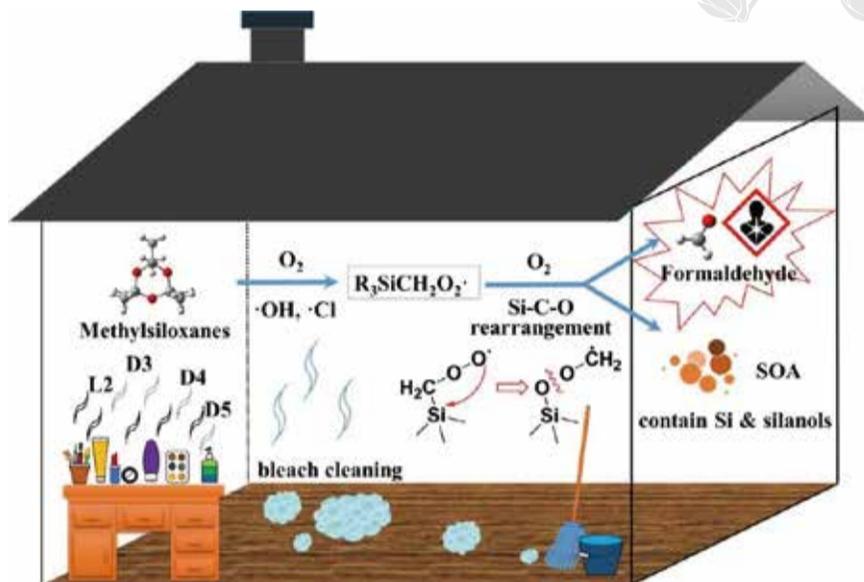
Cite This: <https://dx.doi.org/10.1021/acs.est.0c01090>

Read Online

<https://doi.org/10.1021/acs.est.0c01090>

Recently, Prof. Xie Hongbin's team from School of Environmental Science and Technology published important research work entitled *Formation of Low-Volatile Products and Unexpected High Formaldehyde Yield from the Atmospheric Oxidation of Methylsiloxanes in Environmental Science & Technology* (DOI: 10.1021/acs.est.0c01090), an international authoritative journal in the field of environment.

With stricter regulation of atmospheric volatile organic compounds (VOCs) originating from fossil fuel-based vehicles and industries, the use of volatile chemical products (VCPs) and the transformation mechanism of VCPs have become increasingly important to quantify air quality. Volatile methylsiloxanes (VMS) are an important class of VCPs and high-production chemicals. Using quantum chemical calculations and kinetics modeling, the team investigated the reaction mechanism of peroxy radicals of VMS, which are key intermediates in determining the atmospheric chemistry of VMS. L2-RSiCH₂O₂• and D3-RSiCH₂O₂• derived from hexamethyldisiloxane and hexamethylcyclotrisiloxane, respectively, were selected as representative model systems. The results indicated that L2-RSiCH₂O₂• and D3-RSiCH₂O₂• follow a novel Si-C-O rearrangement-driven autoxidation mechanism, leading to the formation of low volatile silanols and unexpected high yield of formaldehyde at low NO/HO₂•



conditions. At high NO/HO₂• conditions, L2-RSiCH₂O₂• and D3-RSiCH₂O₂• react with NO/HO₂• to form organic nitrate, hydroperoxide, and active alkoxy radicals. The alkoxy radicals further follow a Si-C-O rearrangement step to finally form formate esters. The novel Si-C-O rearrangement mechanism of both peroxy and alkoxy radicals are supported by available experimental studies on the oxidation of VMS. Notably, the high yield of formaldehyde is estimated to significantly contribute to formaldehyde pollution in the indoor environment, especially during indoor cleaning.

Prof. Xie Hongbin is a doctoral supervisor of School of Environmental Science and Technology at DUT. After graduating from Jilin University in 2008, he did postdoctoral research at University of Pittsburgh and University of California at Irvine. He started working at Dalian University of Technology in 2012, mainly engaged in environmental computational chemistry research. In recent years, he has published more than 70 papers indexed by SCI in international journals, including 8 papers in Environmental Science & Technology and Atmospheric Chemistry and Physics.





Students of DLI have won the “Peer Support Award” from UoL

Source: Leicester International Institute, DUT



The University of Leicester (UoL) recently has announced the winners of the Student Opportunities Awards 2019. It is the first time for students from Leicester International Institute (DLI) to apply for the awards this year. Among them, Sun Yuanzhi, a junior undergraduate student, won the Peer Support Award, which makes him the first winner of the award from DLI. In addition, Qin Tianrun, a sophomore, was nominated for the Peer Support Award.

The Student Opportunities Awards is the highest honor of the Annual Student Awards held by UoL for more than 20,000 students. There are 19 awards in total. This year, more than 400 students have signed up for the award. Through comprehensive evaluation, only one person won each award eventually. Among them, Peer Support Award is translated as “Tongji Support Award”, which aims to recognize outstanding students who provide help and support to other students through voluntary service and thus have a positive impact on the university or community.

“When a horse knows it has a long way to go, it will push himself forward even if no one urges it”. As a student of the

first batch in the institute, Sun Yuanzhi has always been strict with himself. He ranks first in the major for three consecutive years, with a weighted average score of 94.3. He has won national scholarship, merit students and other honorary titles for two consecutive years. At the same time, he has made remarkable achievements in various competitions. Furthermore, he took the initiative to take the responsibility of helping other students. He helped more than 140 students in various forms, such as key knowledge lectures, answering questions before examinations, etc..

Sun's award is not only an affirmation of his unremitting self-improvement and selfless dedication, but also an epitome of deep cooperation between China and the UK. The students of DLI have dual school rolls and enjoy the dual high-quality teaching resources of both sides. Under the close cooperation and support, it is believed that the institute will step out of a new era of international cooperation with distinctive characteristics, international vision and connotative development.



TRANSCRIPT

Leics Celebrate You - Student Opportunities Awards 2019/2020

Lauren Heria (Activities and Volunteering Manager):

The finalists for this year's Peer Support Award are: Tianrun Qin, Yuanzhi Sun and Thariq Maulana. The winner is Yuanzhi Sun. Yuanzhi is a student at the Dalian Leicester Institute in China. The Institute currently has around 600 undergraduate students, and all of them are registered University of Leicester students. It's been fantastic to welcome nominations from Dalian for the first time this year, and the quality of the nominations was outstanding.

Our award winner has delivered a highly successful mentoring scheme engaging over 60 students, which was a third of the students on their course. They're continuously and actively seeking feedback to improve their service to students, to continue to support their peers better and better. Congratulations on your well-deserved win!