2024.11.30 University of Science and Technology of China

MONTHLY REPORT

第 3 期

By International College



Abstract

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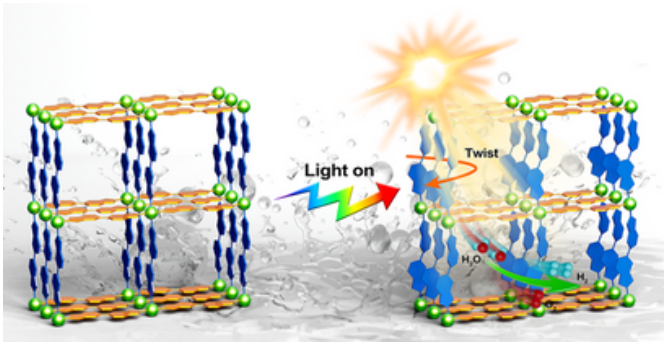
We are excited to announce the launch of a new "Alumni Column" in our Monthly Report! This new section aims to strengthen the connection between the university and our valued alumni community. We warmly invite you to contribute your stories, experiences, insights, or any updates you'd like to share with fellow alumni.



RESEARCH

· 1

Novel Catalyst for Charge Separation in Photocatalytic Water Splitting



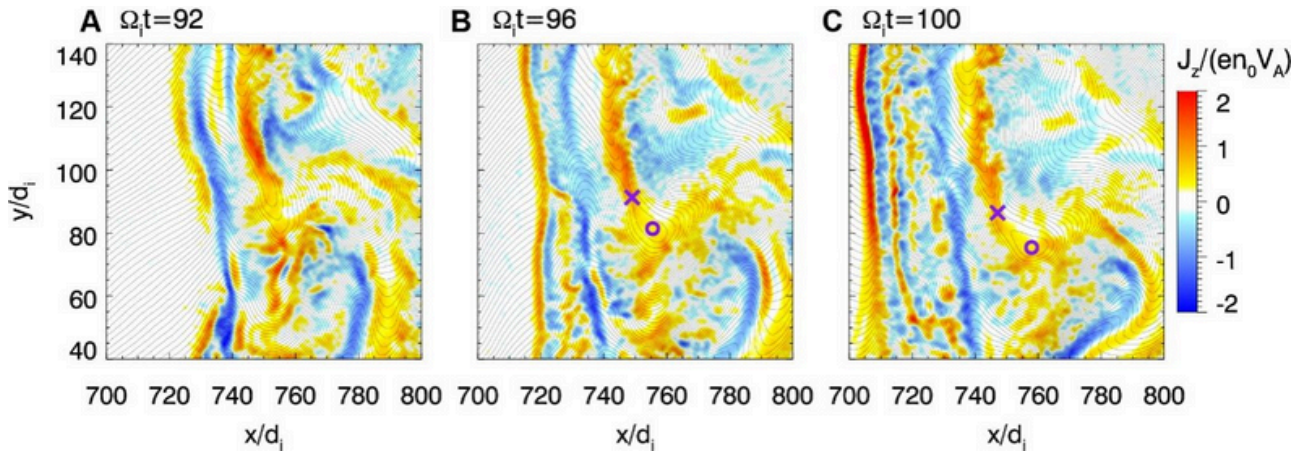
· 2

China unveils "chemist" robot poised to transform science labs



· 3

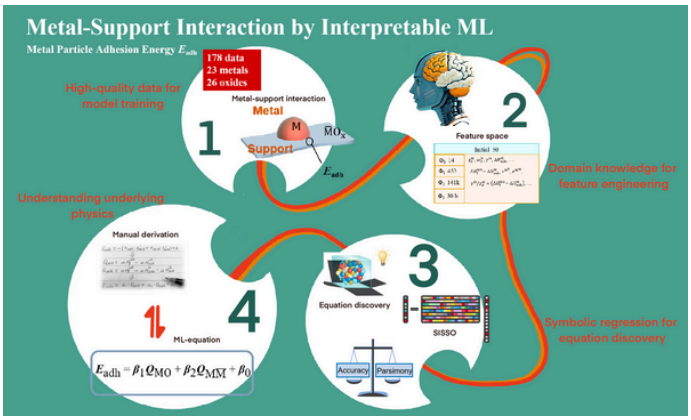
USTC Unveils Origin of Current Sheets in Turbulent Plasmas



RESEARCH

· 4

Unveiling Nature of Metal-support Interaction: AI-driven Breakthrough in Catalysis



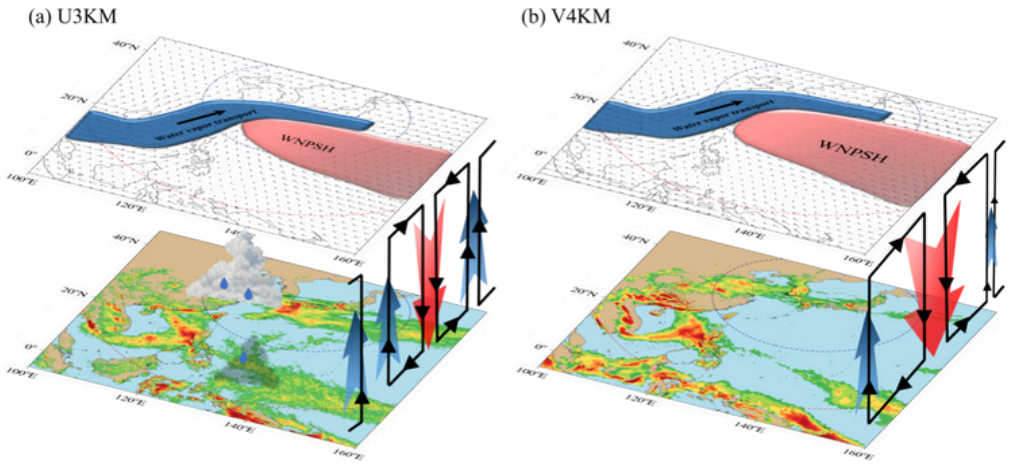
· 5

Unlucky Star: Researchers Discovers Repeated Partial Tidal Disruption Event



· 6

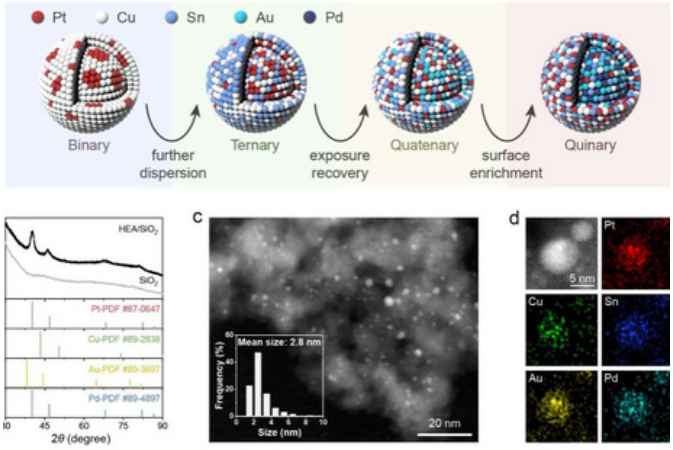
Global Convection-permitting Model Accurately Predicts Plum Rain Event



RESEARCH

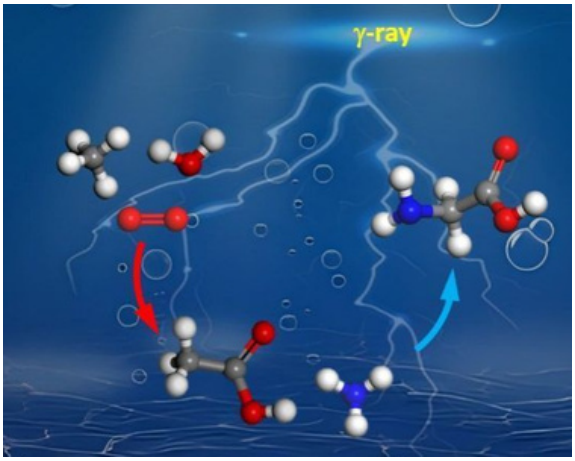
· 7

USTC Develops High-Entropy-Alloy Catalyst to Boost Propane Dehydrogenation Efficiency



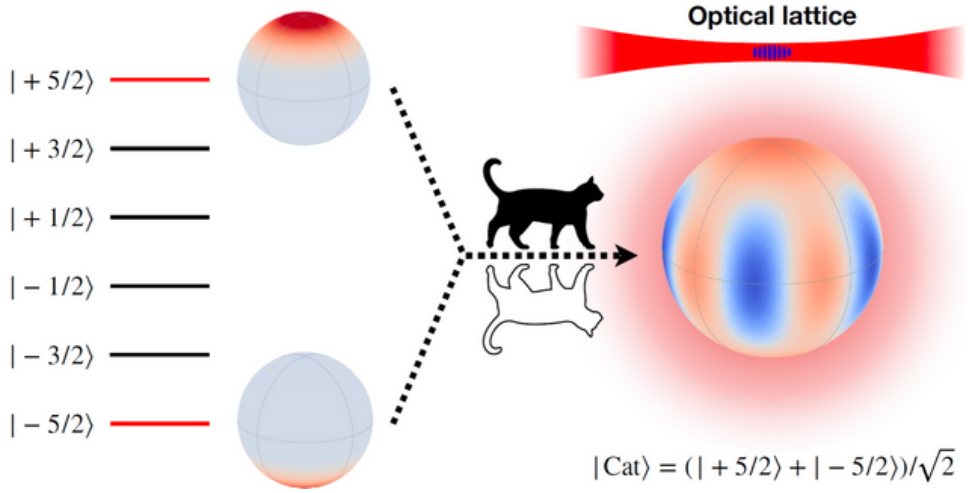
· 8

USTC Finds γ Rays Drive the Conversion of Aqueous-phase Methane to Complex Organic Molecules Including Glycine



· 9

Long-Lived Schrödinger-cat State Achieves Heisenberg-limited Sensitivity



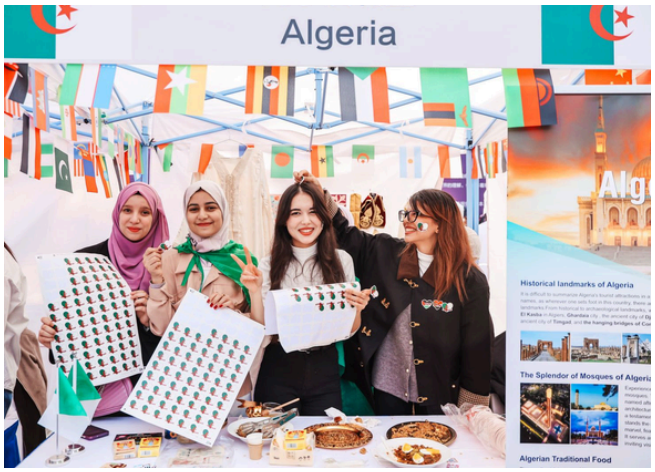
ACTIVITY

· 2024-11-10

USTC Sino-Foreign Cultural Exchange Festival 2024

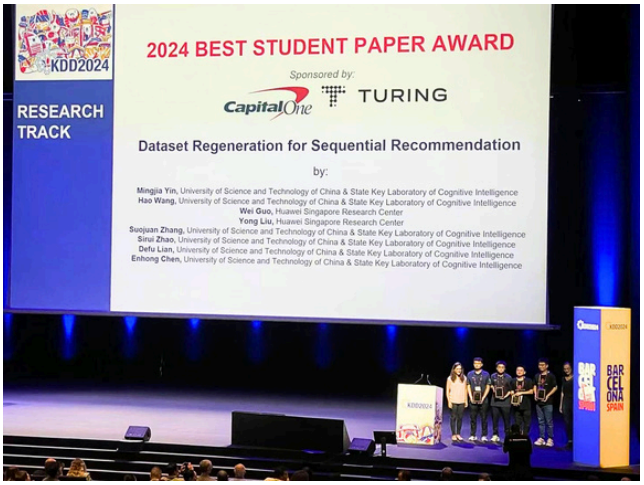






News

USTC Wins Best Student Paper Award at KDD 2024



At the 30th ACM Conference on Knowledge Discovery and Data Mining (KDD 2024) held in Barcelona, Spain, from August 25th to 29th, a team led by Prof. CHEN Enhong from the University of Science and Technology of China (USTC), in collaboration with Huawei, won the Best Student Paper Award for their work titled Dataset Regeneration for Sequential Recommendation.

ALUMNI COLUMN

01 | A Journey Beyond Borders: Reflections of a USTC Alumna

SAMPURNA BALDE
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Greetings to my fellow USTC family,

My journey at USTC has been nothing short of transformative, shaping my academic path and broadening my worldview. From 2020 to 2023, my time at USTC wasn't only about academics — it was a deep dive into cross-cultural experiences, heartfelt people exchanges, and ever-lasting memories. Every step at USTC redefined my professional goals, shaped my personality, and gave me a second warm home in Hefei.

The pandemic forced me and my classmates to begin my studies remotely, but USTC's commitment to fostering a vibrant and enriching community ensured that no one ever felt disconnected. Through online platforms, I actively participated in academic discussions, cultural exchange programs, and research projects, connecting with brilliant minds from around the world.

At USTC, I took part in enriching exchange programs such as APRU (Association of Pacific Rim Universities), and AEARU (Association of East Asian Research Universities), taking me to interesting courses in top universities including Tsinghua University, Tohoku University, National Taiwan University, and Tec De Monterrey. These interdisciplinary programs fostered a rigorous academic perspective and sparked a lifelong curiosity while strengthening my cultural insights into China, Japan, and Mexico. One of the most cherishing memories that I look back on often even today is my exchange year at Ewha Womans University through the Vista Program, which brought me to South Korea. The opportunity to immerse myself in Korean culture, explore cutting-edge academics and research, and form lifelong friendships was truly invaluable. The interdisciplinary coursework and rigorous academic environment at Ewha pushed me to my limits but also equipped me with the critical thinking and problem-solving skills necessary to navigate and succeed in a globalized world.

Beyond academics, USTC provided countless opportunities for personal growth. I was fortunate to actively participate in USTC's Sino-Foreign Cultural Exchange Festival (although virtually) as a Foreign Students Association (FSA) member and cultural study programs like the 11th Cultural Study Program to Huangshan and Hongcun, which deepened my appreciation for Chinese heritage while connecting with peers from diverse countries around the world. The warmth and curiosity of the community reminded me how USTC prioritizes intercultural learning alongside rigorous academics — a trait I believe defines its legacy.

After graduating in 2023, equipped with skills for real-world challenges, I started as a Digital Marketing Specialist at Sangfor Technologies in Shenzhen which was founded by alumni of USTC. No matter where you go, USTC is always with me walking alongside me on this journey of forever learning.

My unique journey at USTC significantly shaped my intercultural competence and leadership skills. Immersing myself in diverse cultures, from serene Japan to the cultural tapestry of China to the modern landscapes of South Korea, expanded my worldview and cultivated a deep appreciation for different perspectives. Adapting to new environments, overcoming language barriers, and navigating unfamiliar academic systems honed my problem-solving and adaptability skills. Collaborating with international peers in group projects and academic discussions fostered teamwork, communication, and leadership abilities. All in all, these experiences equipped me with the necessary tools to thrive in a globalized world and contribute meaningfully to multicultural teams leading to a purposeful and meaningful life.

USTC is more than just a university; it's a global community that empowers you to make a difference.

Once a USTCer, Forever a USTCer!



02 | A Life-Changing Journey: Discovering Myself at USTC

ACE N. BOMBAES
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Before getting admitted to the University of Science and Technology, it was like a test because I didn't know whether I would be accepted, but it was like a leap of faith that I made it to USTC as the first Filipino student. I know that USTC requires and expects a lot from its students, and these expectations motivated me to strive much harder and thrive on growing professionally.

A few things that I learned from my transformative journey as a master's student are to have a good network of good students who are willing to help and extend assistance. I was struggling with research since I was not really good at it, but a good classmate friend, brother, and adviser of mine guided me all throughout my journey. Indeed, diversity is a good ingredient in success. My journey was really bumpy and was never easy for me, and I sometimes describe this as a humbling experience because this taught me a lot how to persevere and be more resilient because at some point I got frustrated and disappointed after many failures and rejections, so I decided to quit and just go back to my country, but it never happened after realizing the importance of pressure, rejections, and failures.

I thought that publishing a research paper once would be enough, but the fire in me encouraged me to write and publish more. My experiences fueled my passion and the love for research, leading to encouraging more students and teachers to write and publish papers through research conferences, seminars and workshops, and colloquia. Citing my experiences helped me a lot to encourage them. Conversely, some of them were able to present their papers and publish them in different local journals.

This led to more participation in international conferences, where I garnered awards for the best research paper and presentation. These achievements earned me recognition as an outstanding citizen in research and education in my country. I have been appointed as high school principal in my country, as lower secondary vice principal in Myanmar, and now as the dean of the institute of liberal arts at Kolehiyo ng Lungsod ng Dasmarinas, a locally funded academic institution in the Philippines, and I strongly believe that USTC has a bigger contribution to these achievements.

I took up a master's in public administration, and am a proud alumnus of USTC from the Philippines, and I believe that once a UTSCer will always be a USTCer who values excellence, works for quality, and uses innovation to benefit the community. I will be forever grateful to USTC, the Chinese Scholarship Council, and China for providing me with the opportunity to see the appearance of academic success and realize my full potential. As I continue to make contributions to academia, I will always carry its teachings and fundamental principles with me.



03 | Wonderful events and experiences in USTC

ONYEKACHI JOMBO
BL14216005

Reflecting on experiences during my study period at USTC, I have gained a lot both in academic and personal development. Due to important research outcomes, I have been able to provide important information for the government, both in research development, university, and consultancy. As studied under the supervision of Prof Song Wei, (Dean School of Public Affairs USTC) a leader per excellent, he is today my role model. I have learnt a lot through his exceptional leadership style and excellent approach to issues and much hard work.



Through the rigorous training, studies and research experienced at USTC during my study period, I have contributed and still contribute towards making the world a better place for humanity. I, at present, am contributing as a senior government consultant Nigeria, this position has given me the opportunity to travel to 23 countries on top official assignments and still counting.

Currently awarded best worker of the year 2022, I have attracted World Bank research grant for almost a million dollars, for rehabilitation of prisons and prisoner's. I have led important delegate towards signing on important contract that may not be mentioned here.

I am happily married to a Chinese beautiful queen, and my marriage is blessed with children, my wife had contributed so much as a pharmacist in Nigeria and world at large especially during the period of the pandemic, she helped the national government for the procurement and distribution of health working materials. I also have my own company, which I am the CEO, Chaoka construction limited, Chaoka is a combination of my wife name and my own name, we procure all construction materials, road working machineries from overseas. I currently have about 150 people working in my company, courtesy of human resources management research, intellectual property research, one belt one road research, tea culture international business.

University of science and technology of China is not just an academic excellences learning center, it's also an environment where students are mentored, with lots of extracurricular activities, excursion visit, and movie class visits. Places visited where, Chinese Court, Anhui museum, Hefei No.1 School to mention but a few. Students are allowed to contribute towards a better sound, and reformed academic learning environment for a seasoned transformation to a better society. This is one of the greatest uniqueness experience observed in USTC, during my study period.

The memories of my time at USTC are treasures that I will carry with me for the rest of my life. From the early days of orientation to the final moments of graduation, every step was a part of a larger journey that helped me shape my future. And while my time of study has come to an end, I know that the lessons I learned, the friendships I made, and the experiences I had will continue to guide me in the years to come. As I move forward in life, I carry with me the knowledge, skills, and memories that USTC has given me. I will always be proud to be a part of its legacy and will forever cherish the days I spent on its campus.