



University : National Chin-Yi University of Technology
Country : Taiwan
Web Address : www.ncut.edu.tw

[SDG7] Affordable and Clean Energy 可負擔能源

[SDG7.4.2] Does your university as a body promote a pledge toward 100% renewable energy (petitions, meetings, discussions, events)?

Taiwan is stepping up its commitment to global net-zero goals through various sustainable and clean energy strategies, with "hydrogen energy" taking a prominent role. Under this initiative, **National Chin-Yi University of Technology (NCUT)** is actively contributing to the hydrogen energy movement by hosting major events in 2024, including the **19th National Hydrogen Energy and Fuel Cell Academic Symposium**, the **16th National Student Cup Hydrogen Energy Vehicle Competition**, and the **2024 Hydrogen Energy and Fuel Cell Technology Forum**.

Key Events

1. **National Student Cup Hydrogen Energy Vehicle Competition** (September 14, 2024):

Hosted by NCUT's Department of Refrigeration, Air Conditioning, and Energy, this competition brought together six teams nationwide, including NCUT's own **CHIN-YI Hydrogen Wing 2** and **H2O Racing Team**. Participants competed in various categories such as dynamic track racing, vehicle design, and system integration. NCUT's H2O Racing Team and Hydrogen Wing 2 won multiple awards, highlighting the university's advancing hydrogen vehicle technology and talent development.

2. **2024 Hydrogen Energy and Fuel Cell Technology Forum** (September 20, 2024):

Held at NCUT, the forum featured industry leaders such as **Delta Electronics**, **Hephas Energy Corporation**, and **Linde LienHwa Group**, who shared insights on hydrogen energy's role in achieving net-zero carbon emissions and its industrial applications. The forum addressed topics including hydrogen power generation, fuel cell technologies, and hydrogen energy's future in transportation, drawing considerable attention and praise.

3. **19th National Hydrogen Energy and Fuel Cell Academic Symposium** (September 21, 2024):

This event, also at NCUT, gathered domestic and international experts, including Prof. **Jon Clipsham** (University of Strathclyde, U.K.) and Dr. **Lina Troskialina** (POLITEKNIK NEGERI BANDUNG, Indonesia). Topics covered ranged from hydrogen production technologies and fuel cell development to system integration. The symposium facilitated international knowledge exchange and showcased Taiwan's advances in hydrogen energy research and its academic influence globally.



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NCUT's Role in Hydrogen Energy Development

NCUT, a leader in **hydrogen energy and fuel cell** research, collaborates with academia, government, and industry to advance Taiwan's sustainability goals. These events further demonstrate the university's commitment to talent cultivation, technological innovation, and international cooperation in the clean energy sector.

Through the symposium and competitions, NCUT fosters the next generation of researchers and engineers while contributing to Taiwan's leadership in the **hydrogen economy**, net-zero transformation, and **sustainable environmental development**.



The 16th National Student Cup Hydrogen Car Competition



Group photo of the 16th National Student Cup Hydrogen Car Competition



The 16th National Student Cup Hydrogen Car Competition is ready to go



The 16th National Student Cup Hydrogen Car Competition starts with the gunshot



Energy Saving Racing Competition



The energy-saving racing process combines the dual energy sources of on-site wind power generation with green energy and green electricity.



H2O Racing team won the dynamic second place and the static second place in the conference competition



CHIN-YI Hydrogen Wing 2 Team
Dynamic masterpiece, static masterpiece, dynamic best spirit award





2024 Conference on Green Technology Engineering and Application

The 21st century faces increasing challenges of energy scarcity, making the balance between economic development and environmental sustainability an essential global concern. In response, **National Chin-Yi University of Technology (NCUT)** hosted the "2024 Green Technology Engineering and Application Seminar" to explore innovative solutions that align with both economic growth and environmental preservation.

Purpose of the Seminar

The seminar aimed to address the pressing need for sustainable practices by emphasizing the role of **green technology** in modern industries. By combining cutting-edge **green engineering solutions** and **industrial applications**, the event sought to provide a platform for experts, academics, and industry leaders to discuss practical strategies that support long-term sustainability goals.

Key Focus Areas

1. Green Technology Integration:

The seminar highlighted the importance of integrating **green technologies** into various industrial sectors to minimize environmental impact while maintaining economic productivity. This included discussions on renewable energy, energy-efficient systems, and eco-friendly manufacturing practices.

2. Sustainable Industrial Applications:

By exploring case studies and innovations in **green engineering**, participants gained insights into how industries can adopt environmentally sustainable practices without sacrificing growth. Technologies such as waste reduction, resource recycling, and clean energy solutions were presented as essential tools for the future of industrial development.

3. Balancing Economy and Environment:

One of the core themes was the challenge of sustaining **economic development** while protecting the environment. Presentations and discussions at the seminar aimed to provide a reference for achieving this balance through thoughtful policy-making, technological advancements, and collaborative efforts across industries.

Impact and Future Goals

Through the **2024 Green Technology Engineering and Application Seminar**, **NCUT reinforced its role as a leader in fostering dialogue and innovation around sustainable development**. The event not only promoted the integration of green technologies into the industrial sector but also served as a catalyst for ongoing research and development in **environmentally responsible engineering**.



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As the world continues to face the dual challenges of energy scarcity and climate change, NCUT's initiative is a vital step toward creating a sustainable future where economic growth and environmental health go hand in hand.

 <p>2024 GTEA 2024 Conference on Green Technology Engineering and Application</p> <p>綠色科技 工程與應用研討會</p> <p>5/31 五</p> <p>報名網站: https://gtea2024.iware.com.tw/ 活動報名費用: 1500元/篇</p> <p>重要時程</p> <ul style="list-style-type: none"> 3/29 (五) 論文初稿截止 4/12 (五) 審查結果通知 4/26 (五) 論文定稿截止 5/05 (日) 報名繳費截止 5/31 (五) 研討會活動 <p>徵文範圍</p> <ol style="list-style-type: none"> 1. 智慧機械與機構設計(SMD) 2. 智慧製造(SM) 3. 綠色製造與循環科技(GMCRT) 4. 綠色材料(GM) 5. 冷凍空調技術(RAC) 6. 綠色能源與節能(GEES) 7. 機電自動化(MA) 8. 其他工程相關領域(OTH) <p>主辦單位 國立勤益科技大學 工程學院</p> <p>協辦單位 國立勤益科技大學 機械工程系 國立勤益科技大學 化工與材料工程系 國立勤益科技大學 冷凍空調與能源系 國立勤益科技大學 精密製造科技研究所博士班 國立勤益科技大學 智慧自動化工程系</p> <p>贊助單位 財團法人張明玉國秀文教基金會</p>	 <p>2023 年能源與冷凍學術暨技術研討會 第六屆能源與冷凍空調「學生優秀論文」競賽</p> <p>10/21 (六)</p> <p>國立臺北科技大學</p> <p>投稿注意事項 (資訊請以官網公布競賽辦法為主)</p> <ol style="list-style-type: none"> 1. 學術與技術論文(口頭發表) 2. 學生優秀論文競賽 <p>徵文暨作品項目</p> <ol style="list-style-type: none"> 1. 重要資訊請公布於 <ul style="list-style-type: none"> ● 台灣冷凍空調學會網站 2. 報名表、論文全文格式(具名、不具名各一份) 請至學會網站下載,資料填寫後請mail至: <ul style="list-style-type: none"> ● tshrae@actr.org.tw (台灣冷凍空調學會信箱) 3. 論文如被接受,至少需安排一位投稿人註冊,並到研討會現場繳口頭發表 <p>徵文範圍</p> <ul style="list-style-type: none"> ● 空調系統技術 ● 冷凍系統技術 ● 建築與環境控制 ● 特殊空調技術 ● 節能與能源回收 ● 新能源與再生能源 ● 熱流與熱交換技術 ● 智慧化控制與機電整合 ● 工程實務技術報告 ● 國際論文 ● 資料中心節能技術 ● 其他相關領域 <p>重要日程</p> <ul style="list-style-type: none"> 08/25 (五) 論文全文投稿收件截止 09/22 (五) 論文全文審查結果通知 10/06 (五) 註冊繳費截止 10/21 (六) 研討會會議及頒獎 <p>註冊費用事項</p> <ol style="list-style-type: none"> 1. 學術與技術論文每篇 NTS1,000; 學生每篇 NTS500 繳費匯款銀行: 玉山銀行城東分行 戶名: 台灣冷凍空調學會 帳號: 0048-940-001680 * 繳款後請來信通知大會(E-mail:tshrae@actr.org.tw) 2. 論文競賽免報名費 <p>指導單位 / 國家科學及技術委員會 主辦單位 / 台灣冷凍空調學會 承辦單位 / 國立臺北科技大學新世代住商與工業節能研究中心 協辦單位 / 國立臺北科技大學能源與冷凍空調工程系</p> <p>財團法人工業技術研究院綠能與環境研究所 國立勤益科技大學冷凍空調與能源系 財團法人工業技術研究院綠能與環境研究所 國立高雄大學機械與能源工程學系 中華民國冷凍空調工程工業同業公會 國立高雄師範大學工業科技教育學系能源與冷凍 台灣省冷凍空調技術公會 立附組 財團法人台北市冷凍空調技術公會 高雄科技大學能源與冷凍空調工程學系 財團法人台北市冷凍空調技術公會 逢康科技大學冷凍空調與能源系 台中市冷凍空調技術公會 國立臺北科技大學能源與冷凍空調工程學系友會 高雄市冷凍空調技術公會 國立勤益科技大學冷凍空調與能源系友會</p>
<p>2024 Conference on Green Technology</p>	<p>International Symposium on Diversified Green Energy Creative Inventions</p>