

# Crosswinds



**KUMARAGURU**  
COLLEGE OF TECHNOLOGY  
character is life

## SMART MOBILITY SUMMIT

27 & 28 MARCH 2026 | Kumaraguru Campus, Coimbatore

The Smart Mobility Summit (SMS'26) is a premier global platform that unites academia, industry leaders, policymakers and innovators from around the world to showcase breakthroughs in the energy and transportation sector while collaboratively shaping the future of safe and sustainable mobility.

## Smart Mobility for a Sustainable Future

Country Lens on  
Taiwan

Spotlight on  
Northeastern University, USA

Student Spotlight on  
Jinesh Aravindan



**K-GEO**  
KUMARAGURU  
GLOBAL ENGAGEMENT OFFICE

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## Smart Mobility Summit 2026 (SMS'26)

**Kumaraguru Campus, Coimbatore • 26–28 March 2026**

Over three intense days at the end of March 2026, Kumaraguru College of Technology traded its usual academic rhythm for the pace of a national design studio on mobility. Classrooms, corridors and test tracks doubled as spaces where CXOs probed grid bottlenecks, researchers dissected the mathematics of advanced drive systems, students tuned and tested custom ebikes, and practitioners worked through how a truly circular battery economy might function in India.

The Smart Mobility Summit 2026 (SMS'26) – cohosted with the Sociey for Smart E-Mobility (SSEM) featured International Conference on Smart Mobility for a Sustainable Future (ICSMSF'26), Industry Conclave on EVolve INDIA '26, the India Electric Bike Challenge IEBC'26 and Virtual Vahana events– set itself an ambitious brief: move the conversation on EVs and smart mobility from isolated pilots to integrated systems. Across roundtables, panels, technical tracks and competitions, three questions kept resurfacing:

- **Can India's grids, cities and batteries really handle mass EV adoption?**
- **Who will design, build and operate these new mobility systems?**
- **How do we ensure the transition is not just electric, but sustainable and inclusive?**



The summit opened with a clear message: mobility innovation must stay rooted in people and place. In her welcome address, Dr. Ezhilarasi, the Kumaraguru College of Technology (KCT), Principal set the ethical compass—innovation is essential, but “unchecked or uninformed innovation” can create as many problems as it solves. Educational institutions therefore, must both push technological frontiers and ensure progress is purposeful, sustainable, and socially aware.

Dr. S. Raghupathy's, Director Strategic Planning and Review, special address tackled the gap between classrooms and industry. Students encounter realworld problems too late, AI is reshaping work faster than curricula, and equations mean little unless linked to brakes, batteries, and traffic flows. His prescription: problem-based, application-oriented learning with industry immersion as a core design principle, not an add-on. Smart mobility is a systems challenge, and systems thinking cannot be built through rote learning.



Inaugural address, Dr. Kurichi Kumar, Chief Innovation & Research Officer

SMS'26 effectively began on the evening of 26 March in QUORUM, where the CXO Roundtable brought industry leaders together before the public sessions opened.

Over two hours – and without slides – the group worked through a small set of sharp questions. The answers set the tone for the summit: **technology is not the bottleneck**. Instead, participants circled around three interlocking constraints – **infrastructure readiness, economic viability and user perception**. Grid upgrades, battery supply chains and charging business models came up as often as motors or power electronics. By the time the networking dinner began, one shared conviction had emerged: no single company, campus or ministry can solve this alone. SMS'26 would need to be a place where these pieces were seen – and designed – as one system.



SMS'26 Conference Proceedings Launch (L-R)  
Dr. Ramesh Babu N, Dr. Ezhilarasi, Dr. Kurichi Kumar,  
Dr. S Raghupathy, Ms. Sivasankari TP

In the inaugural address, Dr. Kurichi Kumar, Chief Innovation & Research Officer, shifted focus from education to cities.

Mobility is moving from ownership to service, from isolated vehicles to connected modes, and from hardwarecentric design to data and digital infrastructure. Electrification is necessary but not sufficient; lasting sustainability depends on clean power, smart charging, and secure data systems.

He also highlighted longterm bets on wireless charging and indigenous technologies to cut import dependence.

Together, these opening sessions framed EVs as one visible node in a wider smart mobility web—spanning grids, data, policy, and pedagogy.

## Cover Story

## Smart Mobility Summit 2026 (SMS'26) Kumaraguru Campus, Coimbatore • 26–28 March 2026

Session: **Building India's Charging Infrastructure: Grid Readiness & Smart Cities** brought together Krishna M (SPR EMF), Karthikeyan Palanisamy (Zeon Charging), and Barathan Kuppusamy (Ozotec Automobile), presenting insights from manufacturing, charging infrastructure, and battery design. The panel explored India's accelerating EV adoption, with projections of 65 lakh EVs by 2025, and highlighted that nearly 93% of charging occurs at homes and workplaces, shifting focus toward destination and neighborhood charging.

Discussions covered battery capacity, emerging chemistries, cost challenges, and concerns around resale value and import dependence. A key theme was the transition from mere charger availability to intelligent infrastructure utilization through grid strengthening at the distribution level, smart charging, and digital load management.

The panel moderated by concluded by Vishwanath Surendiran (Steam-A Private Limited) that while range anxiety is largely psychological, high upfront costs, limited consumer awareness, and the need for integrated urban planning remain critical barriers to scaling EV adoption sustainably.



**Building India's Charging Infrastructure:  
Grid Readiness & Smart Cities**

Session: **"Collaborations for Innovation: Academia, Industry & Government"** featured Mr. Nandhakumar CS (Bosch Global Software Technologies), Dr. Dileep G (Royal University of Bhutan), Mr. Anand Prakasha (Nxzen), and Dr. Kurichi Kumar.

The panel discussed academia-industry-government collaboration, highlighting T-shaped talent, Failure Mode and Effects Analysis (FMEA)-based problem solving, and the importance of aligning research with real-world needs. Insights included the value of ground-truthing beyond literature and the role of students as innovators. Emobility was framed as a systems challenge requiring integrated design.

Key takeaway: practical, collaborative, and interdisciplinary approaches—supported by purposeful AI use—are essential to solving complex mobility problems.



**Collaborations for Innovation: Academia, Industry & Government**  
Reverse Mentoring and Multi-W Engineers

Session: **"Green Energy Loop: Storage, Recycling & Sustainability"** was moderated by Manoj, with insights from Pranav and Barath. The discussion focused on battery lifecycle sustainability, design for reuse, and improving charging efficiency. Barath emphasized extending battery life through thermal management and user practices like maintaining 20–80% charge cycles. Both highlighted the critical role of Battery Management Systems (BMS) in ensuring safety and longevity.

The panel also addressed gaps in recycling readiness, policy uncertainty, and the need for reliable charging infrastructure and digital tools.

Key takeaway: advancing EV adoption requires robust BMS, circular battery strategies, transparent system design, and stronger policy and ecosystem support.



**Green Energy Loop: Storage, Recycling & Sustainability**  
Recycling readiness & Robust BMS

### Empowering Future Engineers in Assisted Driving Technologies: Virtual Vahana 2026

Partnering with MathWorks, virtually students with hands-on exposure to Assisted Driving Systems and emerging self-driving technologies in a safe, virtual environment which exhibited 100+ solutions.

Key takeaway: Focusing on safety-first design, human-machine interaction, and responsible automation, 15 teams competed with 5 reaching the finals.

## Smart Mobility Summit 2026 (SMS'26) Kumaraguru Campus, Coimbatore • 26–28 March 2026



**Advanced Mobility Systems: Who will Build All this**  
Global Skill Gap and roles of startups

Session: **“Beyond Roads: Startups Catalysing Electric and Advanced Mobility Ecosystem”** featured Lakshmi Meena and Gaima Jhamb (AVP, ASDC), focusing on talent, startups, and global collaboration. The panel highlighted India's \$200 billion EV opportunity across batteries, software, and autonomous systems, while stressing that mobility is now multidisciplinary and data-driven. Discussions addressed the global skills gap and the need for “Multi-W” engineers with cross-domain expertise.

The complementary roles of startups (speed, innovation) and large firms (scale, reliability) were examined, alongside the importance of initiatives like Startup India.

Key takeaway: India's ability to lead in mobility will depend on talent transformation, startup-driven innovation, and deep global collaboration.

Research Track: **“The Research Spine: ICSMSF'26 Tracks and Plenaries”** featured contributions from Kiran Jasti (Propel Industries), Dr. Sheik Mohammad Sulthan (UTB, Brunei), S. Karthik (ePropelled Systems), and Dr. Ramadhaas A. S (GARC). The conference served as the technical backbone of SMS'26, covering intelligent mobility ecosystems, connected networks, vehicle controls, and digital safety. Discussions emphasized data-driven mobility, EV policy, autonomous systems, and the gap between simulation and real-world implementation.

Key takeaway: advancing smart mobility requires strong research integration across infrastructure, algorithms, control systems, and cybersecurity, ensuring solutions are both innovative and deployment-ready.



### Steel, Lithium and Adrenaline: The India Electric Bike Challenge'26

Away from the airconditioned halls, the back gate parking and ground turned into an openair lab for the India Electric Bike Challenge 2026.

Over two days, student teams: designed, costed and defended their ebike concepts in static events, passed rigorous technical inspections, and then pushed their machines through acceleration, manoeuvrability, gradeability, bump tests and an endurance race.

The pits buzzed with the same concepts debated in the conference rooms – battery management, powertrain efficiency, cost optimisation – but translated into steel frames, wiring harnesses and lap times. The competition made tangible one of the summit's core messages: mobility skills are forged as much in the pit lane as in the classroom.



**Five Cross-Cutting Insights from SMS'26** synthesized the summit's key learnings for policymakers, partners, and participants. It emphasized that India's EV challenge lies not in technology but in systems—grid readiness, charging integration, economic models, and user trust. Smart mobility was reinforced as deeply interdisciplinary, blending engineering, science, and digital intelligence. The rise of T- and W-shaped engineers highlighted evolving talent needs. Batteries and the circular “green energy loop” emerged as strategic priorities, alongside the role of campuses as integrated mobility ecosystems.

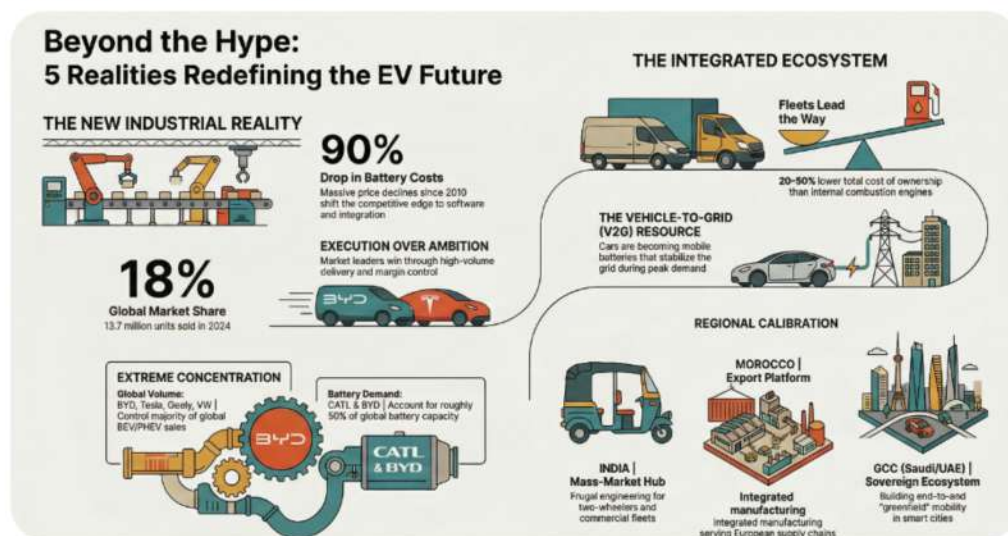


## Feature Article

## Beyond the Hype: 5 Surprising Realities Redefining the Electric Vehicle Future

The era of "pure momentum" in the electric vehicle (EV) industry has reached its conclusion. For a decade, the narrative was fueled by breathless headlines, aggressive climate targets, and a venture capital driven obsession with the next big battery breakthrough. We are now pivoting from the "ambition" stage to the hard reality of industrial execution.

By 2030, global EV sales (battery-electric and plug-in hybrids) are projected to reach around 35–40 million units, according to major outlooks, accounting for roughly 45–50% of global new car sales. Projections from multiple agencies suggest that by the early 2030s, EVs could push past the 55–60% share range, ending the transition phase and cementing electric drivetrains as the default choice in many markets. The industry is rapidly maturing, moving from a debate over "what's possible" to a relentless focus on "what's bankable," with an unforfeiting emphasis on asset performance, grid integration, and investment-grade scale. As we enter this new chapter, five distinct realities are rewriting the strategic playbook for investors, policymakers, and manufacturers alike.



*The EV story is transitioning from what's possible to what's bankable... the winners now are those who treat electrification as an 'integrated industrial transformation,' spanning infrastructure, energy systems, manufacturing resilience, and finance."*

### 1. Execution is the New Ambition

The market's centre of gravity has shifted from concept to capacity. Leadership is no longer defined by who can launch a single innovative model, but by which heavyweights can master the brutal physics of high-volume delivery and margin control. A small cohort, specifically BYD, Tesla, Geely and the Volkswagen Group, now controls a large share of global EV volume, especially in battery electric and plug-in segments.

These winners share a common trait. They treat electrification as an integrated industrial transformation rather than a mere engineering pivot. This dominance extends deep into the supply chain, where CATL—the world's largest EV battery maker—and BYD together account for roughly half of global EV battery demand in recent years, anchoring a significant portion of the world's installed EV battery capacity.

For those outside this inner circle, the barrier to entry is no longer basic technology, but the sheer scale and supplychain control required to survive.

This shift toward operational discipline is the defining characteristic of the current era. As noted in industry commentary (e.g., Highways Today and similar analyses): The EV story is transitioning from what's possible to what's bankable... the winners now are those who treat electrification as an 'integrated industrial transformation,' spanning infrastructure, energy systems, manufacturing resilience, and finance."

### 2. Fleet Electrification is the Secret Commercial Proof Point

While consumer-facing SUVs grab the headlines, the commercial sector is the true "earlyscale anchor" of the entire ecosystem. Fleet electrification is scaling faster than private ownership in many regions because the commercial logic is simply too strong to ignore. Predictable routes and centralized charging eliminate much of the "range anxiety" that still plagues the retail market.

For operators, the math is compelling: under the right conditions (high daily utilization, suitable duty cycles, relatively stable electricity prices), transitioning to electric can yield on the order of 20–50% lower total cost of ownership per kilometer versus internal combustion, especially in buses, delivery vans, and ridehailing fleets. This creates a massive, reliable revenue stream that justifies the heavy capital expenditure required for highcapacity charging depots and corridors.

Crucially, fleets are creating a powerful "feedback loop" for the rest of the market. By providing guaranteed utilization for new infrastructure, fleet demand derisks the buildout of charging networks. This serves as the pragmatic foundation that will eventually reduce friction for the wider consumer market.

## Beyond the Hype: 5 Surprising Realities Redefining the Electric Vehicle Future

### 3. Your Car is Not Just a Load; It's a Grid Resource

We are witnessing the death of the "dumb load." The vehicle in your driveway is no longer just a consumer of electrons; it is becoming a mobile battery pack capable of supporting and stabilizing the energy system. Through VehicleGrid Integration (VGI) and Virtual Power Plants (VPPs), EVs are shifting from liabilities to flexible grid resources.

To unlock this "bankable" ROI for utilities and system operators, the U.S. Department of Energy has articulated several key principles for VGI. One DOE-backed framing (e.g., in its VGI Blueprint and related documents) emphasizes: Universal Value – Grid investments and VGI programs should provide benefits across all ratepayers and keep electricity affordable. RightSized Infrastructure – Build the right capacity, in the right places, at the right time to avoid unnecessary overbuilding.

StandardsSupported Innovation – Use open, interoperable standards so different vehicles, chargers, and utilities can "talk" to each other. CustomerCentered Options – Offer simple, transparent participation pathways and compensation for drivers, fleets, and building owners.

Secure Coordination – Ensure both cyber and physical security as vehicles and chargers become part of critical infrastructure. Technologies like bidirectional charging—VehicleToGrid (V2G), VehicleToBuilding (V2B), and VehicleToHome (V2H)—allow vehicles to feed energy back to buildings or the grid during peak demand. This symbiotic relationship reduces the need to overbuild peaking capacity and grid infrastructure, helping to keep electricity rates lower and improving system resilience.

### 4. The Great Geographic Recalibration

The EV market is no longer one "global" story but a chessboard of roles: lead demand centres, manufacturing basins, resource anchors, and sovereign-backed ecosystems. One-size-fits-all strategies are obsolete.

#### The Three Global Poles

- **China – Production Dominance**
  - ~67% of global EV sales and ~70% of production (2024)
  - Leveraging scale for exports and price competitiveness
  - Targeting ~33% global light vehicle market share
- **Europe – Regulatory Pacesetter**
  - EV share expected to reach 80–90% of new sales by mid-2030s
  - Focus: premium systems, software-defined vehicles, grid integration
- **North America – Industrial Volatility**
  - Large-scale factory expansion underway
  - EV adoption forecast revised down from ~48% to ~27% by 2030
  - Key challenge: aligning production capacity with demand

#### Emerging Manufacturing & Resource Hubs

- **India – Frugal Export**
  - TemplateFocus: low-cost 2W/3W and small commercial EVs
  - Target: ~30% EV share of total sales by 2030
  - Role: scalable, frugal solutions for Global South markets
- **Morocco – Africa's Automotive Hub**
  - Automotive is the top export sector
  - Capacity: >700,000 vehicles annually
  - Advantage: cost-competitive, EU-adjacent production (ICE & EVs)
- **Southeast Asia – Resource-Driven Value Chains.**
  - Indonesia controls ~60% of global nickel supply
  - Building integrated battery value chains
  - Role: resource-based manufacturing + growing demand markets

#### Strategic Takeaways

**Demand leaders:** China, Europe, high-income markets

**Manufacturing basins:** China, Eastern/Southern Europe, Mexico, Morocco, Southeast Asia

**Innovation hubs:** Europe, parts of North America, East Asia

**Resource anchors:** Canada, Australia, Latin America, Africa, Indonesia

**Adaptive strategists:** India and ASEAN (localized EV solutions)

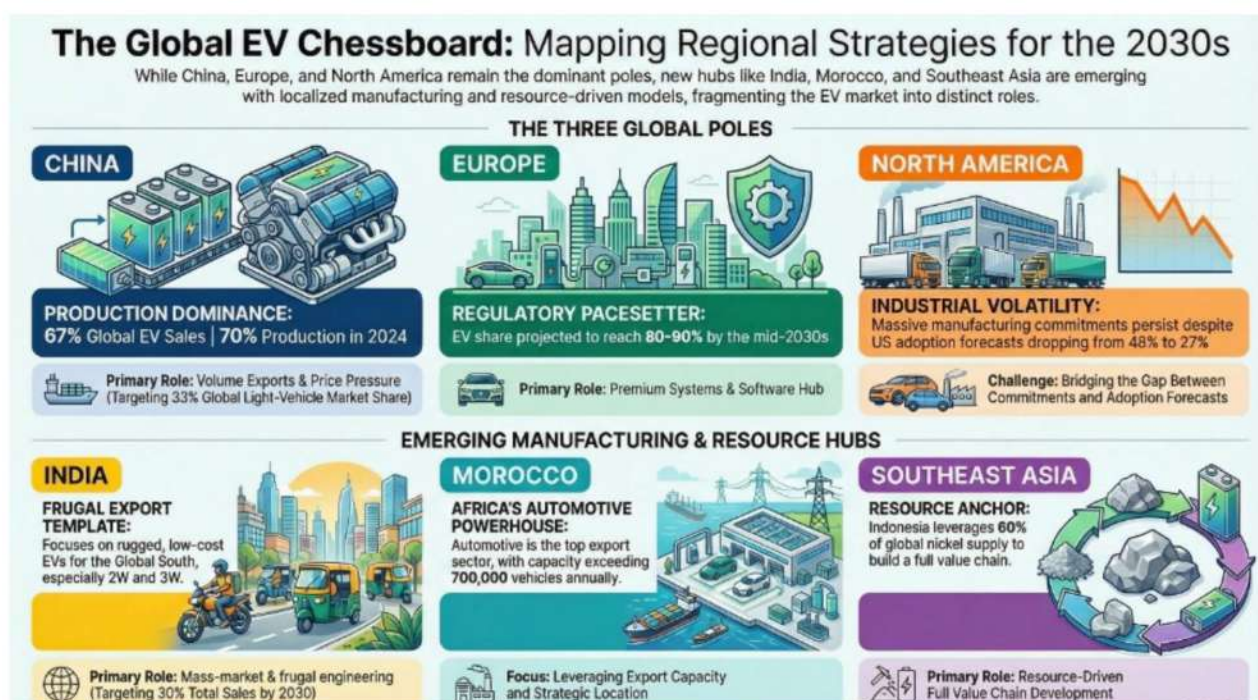
## Beyond the Hype: 5 Surprising Realities Redefining the Electric Vehicle Future

### 5. The Ecosystem is No Longer OEM Centric

Influence in the transportation sector is shifting away from traditional vehicle manufacturers (OEMs). While EV battery pack prices have fallen by around 80–90% since 2010 on a per kWh basis, that decline has pushed much of the incremental "value-add" elsewhere in the stack. The new competitive advantage is not the cell chemistry alone, but the software and systems integration required to manage it across vehicles, buildings, and grids.

We are entering an era where charging providers, energy system players, and infrastructure integrators hold the keys to the kingdom. Electrification is no longer a product category; it is a connected, transferable system that spans transport, energy, and digital infrastructure.

The true prize now lies in infrastructure coordination. As hardware costs decline, the next wave of scaling requires software-defined platforms that can manage complex energy flows across millions of connected assets. The OEMs who survive will be those who successfully transition from being "metabashers" to being system integrators within this broader energy web—partnering deeply with utilities, grid operators, cities, and digital platform players.



### Conclusion: From Automotive Trend to Global Transformation

The "renaissance" we are witnessing in the EV sector is not a simple sales spike; it is a total rebuild of our industrial foundations. The industry has moved past the era of novelty and entered an age of operational discipline and infrastructure management.

This transition requires a fundamental alignment between capital, policy, and energy systems. The foundations are being reinforced, and the ecosystem is widening far beyond the dealership floor.

As these complex systems begin to integrate into the fabric of daily life, one question remains for every leader:

**Is your local community or business truly prepared for the infrastructure management reality of full electrification?**

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## Lighting the Path: From Kumaraguru Classrooms to Global Entrepreneurship

How alumnus Shinoj Aravindan built a career illuminating industries and inspiring future innovators

From the classrooms of Kumaraguru to leading ventures in the global lighting industry, Shinoj Aravindan, 1995 engineering graduate from Kumaraguru College of Technology (KCT), has built a journey defined by resilience, leadership, and entrepreneurial vision.

Today, Shinoj is a serial entrepreneur managing multiple businesses in the electrical and lighting sectors, a journey that began taking shape in 1998. His professional path evolved after completing his Master's in Business Administration, which enabled him to gain rich experience with several prominent companies across the Middle East.



Shinoj Aravindan, Class of 1995  
BE Electrical and Electronics Engineering

"Kumaraguru laid the foundation to my engineering fundamentals and the value system that continues to guide my business today."

A defining phase of his career came when he joined GE Lighting, where he led the Lighting Division in the Middle East. During this time, he had the opportunity to undergo leadership training at GE Crotonville in New York, one of the world's most renowned corporate leadership development institutes. This experience strengthened his leadership capabilities and helped shape the resilient entrepreneur he is today.

Reflecting on his formative years, Shinoj credits Kumaraguru College of Technology for laying the foundations that continue to guide him. The rigorous engineering fundamentals, the strong support system, and the institution's emphasis on values created a lasting impact on both his professional and personal outlook.

These principles continue to influence the culture within his businesses. Inspired by Kumaraguru's philosophy "**Character is Life**," Shinoj has adapted it into a guiding mantra within his own organizations — "**Life in Light**."

For current students, his advice is both simple and profound: stay focused on what you want to achieve, dream big, and keep learning every day. In an era of rapid technological transformation, the ability to adapt and stay updated is essential.

Shinoj believes that early adoption of new ideas and technologies often creates the biggest opportunities. At the same time, he encourages students to embrace experimentation during their college years.

One aspect of student life he deeply misses is the daily interaction with professors and mentors, whose collective wisdom and guidance shaped his thinking and approach to problem-solving.

Through his journey, Shinoj Aravindan demonstrates that strong foundations, continuous learning, and the courage to innovate can truly illuminate the path to success.

His final message to students is one that reflects both humility and wisdom: **make mistakes and learn from them. College, he says, is one of the few phases in life where experimentation comes with freedom.**

**"Think boldly and experiment with your knowledge," he advises. "You may not always have that luxury later in your career."**

**Emerging Fields in Lighting & Electrical Engineering**  
Shinoj highlights several exciting areas that students should explore as the industry evolves:

### LiFi (Light Fidelity)

A revolutionary wireless communication technology that uses light waves instead of radio signals for high-speed data transmission.

### IoT in Lighting

Integration of smart sensors and connected devices into lighting systems, enabling intelligent infrastructure in smart cities and buildings.

### Human-Centric Lighting

Lighting solutions designed to support human health, productivity, and well-being by aligning artificial lighting with natural circadian rhythms. These fields represent the next frontier in intelligent lighting systems, blending engineering, digital technology, and design innovation.

"Dream big, Stay focused, Adapt and Learn something new in your field every single day."

**Article by Shinoj Aravindan**  
**Serial Entrepreneur Electrical & Lighting Industry**  
**Managing multiple businesses in the lighting and electrical sectors since 1998**  
**Strong advocate for innovation, technology adoption, and value-driven entrepreneurship**

## Partner Spotlight

### Northeastern University: Where Learning Meets Industry

We are delighted to spotlight a new partnership with Northeastern University, USA, grounded in a shared commitment to academic excellence and global opportunity. To mark this collaboration, an exclusive incentive is being offered to high-potential candidates applying for graduate programs for the Fall 2026 intake.

Students enrolling in a master's program will benefit from a combined 13% scholarship (8% Partner Award + 5% Tuition Scholarship), along with a full application fee waiver, making this opportunity both prestigious and accessible.



Boston, Massachusetts



Charlotte, North Carolina



Silicon Valley, California



Boston, Massachusetts

Founded in 1898, Northeastern is renowned for its leadership in experiential learning, research, and innovation—integrating academic study with real-world application. Students gain hands-on experience through co-ops, research, service learning, and capstone projects, enabling them to graduate with a strong professional edge.

A key differentiator of Northeastern is its expansive global campus network, which includes 13 campuses across the United States, Canada, and the United Kingdom. From its flagship campus in Boston to major innovation hubs such as Silicon Valley, Seattle, and Toronto, where students are immersed in dynamic environments that connect them directly to leading industries and employers. This network allows students to study in multiple locations, collaborate with a diverse international community, and access global career opportunities. Regardless of where they are based, students benefit from a unified academic system and the ability to engage with faculty, peers, and partners across the entire network.

Northeastern offers more than 200 programs available to international students, including nearly 100 STEM-designated degrees. Popular areas of study include engineering, computer science, professional studies, and the sciences. The College of Engineering is known for its interdisciplinary approach and strong emphasis on innovation and research. The Khoury College of Computer Sciences offers cutting-edge programs in fields such as artificial intelligence, data science, and computer science, with flexible pathways for students from diverse academic backgrounds. The College of Professional Studies focuses on industry-relevant education delivered by experienced practitioners, while the College of Science drives impactful research across disciplines including life sciences, mathematics, and sustainability.

At the core of a Northeastern education is its experiential learning model. Through opportunities such as co-op placements, research initiatives, service learning, and capstone projects, students gain hands-on experience and apply their knowledge in real-world settings. This approach not only enhances academic learning but also helps students build strong professional networks and graduate with a competitive edge in the global workforce.

★ **Boston**  
**Massachusetts**

★ **Silicon Valley**  
**California**

★ **Seattle**  
**Washington**

★ **Charlotte**  
**North Carolina**

★ **Arlington**  
**Virginia**

★ **Oakland**  
**California**

★ **Portland**  
**Maine**

★ **London**  
**United Kingdom**

★ **Vancouver, B.C.**  
**Canada**

★ **Toronto, ON**  
**Canada**

★ **Miami**  
**Florida**

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## Harnessing AI to Protect Elephants and People: Kumaraguru Institutions (KI) Partners with Harvard University



Kumaraguru Institutions Team with Prof Venkatesh N. Murthy

As elephant habitats across southern India undergo rapid transformation due to climate change, deforestation, and agricultural expansion, communities in districts like Coimbatore are increasingly facing the consequences of human-elephant conflict. Crop destruction, property damage, and tragic loss of life have become recurring realities for farming families living at the forest margins. Addressing this urgent challenge requires not just policy interventions, but innovative scientific and engineering solutions.

Kumaraguru Institutions is proud to be a key collaborator in a pioneering research initiative that brings together the best of field expertise and cutting-edge technology.

The project, titled **"Machine Learning Approaches to Understand and Mitigate Human-Elephant Interactions,"** has been awarded the 2026–27 Faculty Research Grant by The **Lakshmi Mittal and Family South Asia Institute at Harvard University, with a funding of USD 11,000.**



Harvard Biological Research infrastructure

KI plays a vital role in bridging the gap between technology and the field. The KI team will support the installation and operation of camera traps at forest-agriculture margins, facilitate approvals with the Tamil Nadu Forest Department, and coordinate with local communities. The footage collected will feed into Harvard's advanced AI pipeline, which uses tools such as DeepLabCut to automatically detect individual elephants, analyse their behavioural patterns, and enable real-time early-warning alerts for nearby residents and farmers. The expected outcomes of this project are transformative. **"By building a system that can identify and communicate elephant presence and behavior in real time – through mobile alerts, SMS, or siren systems – we aim to reduce conflict incidents and improve community safety significantly"**, says Saravanan Chandrasekaran of KI.

Beyond immediate impact, the project lays the groundwork for scaling this model to other conflict-prone regions across India, and for attracting larger funding to expand the effort further. This initiative exemplifies Kumaraguru Institutions' commitment to applying technology meaningfully – towards conservation, community welfare, and a more harmonious coexistence between humans and wildlife.



Saravanan Chandrasekaran, Kumaraguru Institutions  
Prof. Venkatesh N Murthy, Harvard University

Article by Saravanan Chandrasekaran,  
Assistant Vice President,  
Climate and Sustainability Projects  
Kumaraguru Institutions

## Global Engagements

## Building Market-Focused Dairy Entrepreneurs through the PUM Netherlands Global Expertise

Kumaraguru Institutions marked an important milestone in strengthening the dairy entrepreneurship ecosystem by hosting a three-day entrepreneurship and market development program at the Coimbatore campus in collaboration with PUM Netherlands Senior Experts and PUM India. The program brought together 16 dairy entrepreneurs for an intensive learning experience, with five entrepreneurs receiving one-to-one coaching support to refine their business strategies.

**“Stop selling milk. Start solving customer problems with strong outcomes.”**



Participants of **Building on Dairy Brands** Session

Their insights and international case studies helped entrepreneurs understand how branding, market positioning, and customer engagement drive successful dairy businesses.

In addition to group sessions, individual mentorship was provided to emerging dairy brands, including ABT Industries, Paal Daapa, Viifresh, Natural Farm, and Ma2 Milk, enabling them to strengthen their brand positioning and market strategies.



Global FMCG Strategies: Student Interaction with Eric & Franc

**“Together, we can create sustainable agricultural solutions that increase resilience to climate change while enhancing food security, income, and environmental sustainability for rural communities.”**

Article by  
Dr Thanammal SR, Program Manager (Research),  
Kumaraguru Institutions

The program focused on transforming how entrepreneurs approach their businesses—moving beyond production to market-driven thinking. Participants were encouraged to reflect on their identity as entrepreneurs and understand the customers they serve.

A highlight of the program was the **“Building on Dairy Brands”** session, where entrepreneurs explored how successful dairy enterprises are built around customer value rather than product volume. The sessions covered identifying customer needs, developing strong value propositions, building trust through branding, and aligning pricing with perceived customer value.

The program was guided by global experts Eric Van Blanken and Franc Reefman from PUM Netherlands Senior Experts, who brought extensive experience in FMCG and dairy marketing.



One-to-One Mentorship Meeting for ABT Industries

Over 50 students from Agribusiness and Business Administration participated in an interactive masterclass on Global FMCG Strategies: Value Creation, Marketing & Sales Excellence, organized with the Kumaraguru Global Engagement Office. The session provided insights into FMCG practices, customer value creation, branding, and market-driven business models, offering students valuable exposure to real-world global market perspectives.

Through initiatives like this, Kumaraguru Institutions continues to build a strong platform for climate-smart dairy entrepreneurship, supporting farmers and rural enterprises to transition from producers to market-focused entrepreneurs, while contributing to sustainable and resilient rural economies.

## The Power of Small Changes: Molecules and the Hidden Logic of Life

### Students' Global Insight Session by Dr. Edel M Hyland, Queen's University, Belfast



Discussion on collaborations – Kumaraguru Institutions and Queen's Mary University, Belfast

Kumaraguru Institutions recently hosted delegates from Queen's University Belfast, a prestigious Russell Group university globally recognised for its excellence in biological sciences and biotechnology research. The visit focused on strengthening academic collaboration and exploring opportunities for joint initiatives in research and higher education.

The delegation included Dr. Edel M. Hyland, Senior Lecturer from the School of Biological Sciences, and Ms. Pavithra Janani, Regional Manager – South India and Sri Lanka. The program began with an interaction session with faculty and leadership to discuss potential academic partnerships, research engagement, and avenues for institutional collaboration.

As part of the visit, Dr. Hyland delivered a guest lecture titled "The Power of Small Changes: Molecules and the Hidden Logic of Life" offering students and faculty valuable insights into molecular science and its broader impact.

The visit fostered meaningful dialogue and opened pathways for future collaboration between Kumaraguru Institutions and Queen's University Belfast.



Dr. Edel M Hyland along with Kumaraguru faculty and students, in an interaction

## Clean Energy Systems – Research, Development & Demonstration

### Students' Global Insight Session by Dr. Arunachalam Mada Kannan

#### Arizona State University, Tempe, USA.



Dr. Arunachalam Mada Kannan & Ms. Roshan Lalan with Mechanical Engineering Faculty & Global Engagement Office Team

Kumaraguru Institutions recently welcomed a distinguished delegate from Arizona State University, marking a meaningful step toward deeper academic collaboration in clean energy and sustainable technologies.

The visit featured Dr. Arunachalam Mada Kannan, Professor and Graduate Program Chair in Clean Energy Systems, whose presence set the tone for an insightful and forward-looking engagement.

A compelling guest lecture titled "Clean Energy Systems – Research, Development & Demonstration." by Dr. Kannan, offered students and faculty a window into cutting-edge advancements, emerging global trends, and practical applications shaping the future of clean energy.

Beyond the lecture, a focused discussion brought together academic leaders to explore pathways for collaboration—ranging from joint research initiatives and faculty engagement to broader institutional partnerships. The conversations reflected a shared commitment to innovation, sustainability, and impactful global cooperation. More than just a visit, the interaction laid the groundwork for a promising partnership—one that aligns vision with action and opens new avenues for Kumaraguru Institutions to engage in globally relevant research and academic excellence in clean energy systems.

## Global Engagements

### Translational Bioengineering: From Lab Innovation to Clinical Application Dr. Dhruv Seshadri, Lehigh University, USA

Kumaraguru Global Engagement Office facilitated an engaging session by Dr. Dhruv Seshadri on "Translational Bioengineering: From Lab Innovation to Clinical Application." for the Department of Biotechnology, students and faculty. The session offered students a clear perspective on how scientific discoveries evolve from experimental research into real-world healthcare solutions. Drawing from his work at Lehigh University, Dr. Seshadri shared insights into his research lab's focus areas, highlighting how interdisciplinary approaches in bioengineering are driving innovations in diagnostics, rehabilitation, and human performance. His talk emphasized the importance of bridging the gap between laboratory research and clinical impact, inspiring students to think beyond theory and towards application-driven science.



Discussions with Dr. Dhruv Seshadri, Stacey Burger, Dr. Vinita Desai of Lehigh University and Dr. Padhmanand Sudhakar, Department of Biotechnology of Kumaraguru College of Technology



Dr. Dhruv Seshadri, Stacey Burger, Dr. Vinita Desai of Lehigh University with Department of Biotechnology faculty and Global Engagement Office Team of Kumaraguru Institutions

In parallel, a strategic meeting was held with Stacey Burger, Director of Global Engagements and Partnerships and Dr. Vinita Desai, Senior Advisor Recruiting Strategy & Partnerships, at Lehigh University. Ms. Burger, presented an overview of Lehigh's academic strengths, global outlook, and interdisciplinary approach to education and research. The discussion highlighted strong synergies between Lehigh and Kumaraguru Institutions, particularly in innovation-driven learning, industry integration, and a shared commitment to impactful, globally relevant education—laying the foundation for meaningful future collaboration.

### Global Masters Acceleration Program (G-MAP) Level 101-102



G-MAP participants engaged in hands-on portfolio building



The 3-day G-MAP (Global Masters Acceleration Program) for the Kumaraguru School of Innovation brought together 28 highly engaged students from CSE, IT, and AI & DS, creating a focused and immersive learning experience around global academic pathways.

#### Day 1: Building Foundations

Students created digital portfolios, completed a personality assessment, and learned to present their profiles effectively using AI-supported tools.

#### Day 2: Exploring Global Opportunities

Students researched and shortlisted universities, evaluating key factors like rankings, costs, and course offerings.

#### Day 3: Simulation-Based Learning

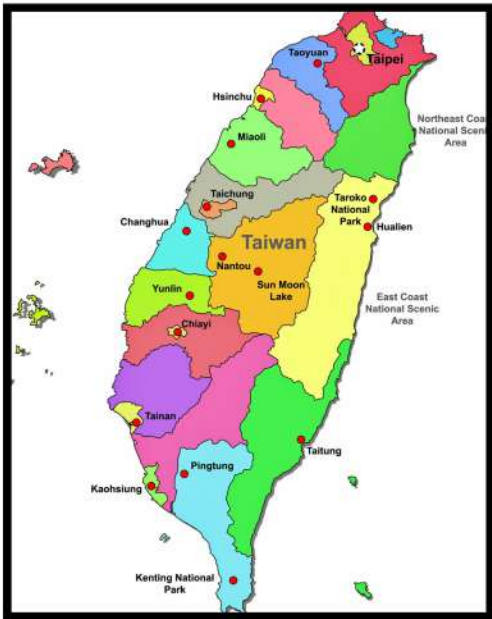
An interactive "University Bidding" simulation immersed students in real-world admission dynamics, including competition, financial considerations, and decision-making from both student and institutional perspectives.

#### Conclusion

The program combined research, technology, and experiential learning, equipping students with clarity and confidence for global academic pathways.

# Taiwan

Country Lens



|                               |                                                                                                                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capital                       | Taipei                                                                                                                                                                                                                                              |
| Currency                      | New Taiwan Dollar (TWD)                                                                                                                                                                                                                             |
| Population                    | 23,039,831 (Approx. as per 2026)                                                                                                                                                                                                                    |
| Major cities                  | Taipei, New Taipei City, Taichung, Kaohsiung, Tainan, Banqiao, Taoyuan, Hsinchu, Keelung, Chiayi                                                                                                                                                    |
| Industry                      | Electronics, Machinery, Finance, Agriculture, Food processing, Information technology                                                                                                                                                               |
| GDP                           | 1,637 billion USD (2025 estimate)                                                                                                                                                                                                                   |
| Higher Education Institutions | 128 universities and colleges                                                                                                                                                                                                                       |
| Academic cycles               | Two intakes<br>Fall – September, Spring – February                                                                                                                                                                                                  |
| Popular Programs              | Engineering, Biological Sciences, Biotechnology, Materials Science, Electronics, Business and Technology                                                                                                                                            |
| Post-study options            | After successful completion of program, the student can stay for a year on a job-search residency program, which is further extendable to another year. Students must opt only for full-time work. No part-time allowed for international students. |
| Visa policies                 | The student visa after graduation to be converted to a Job-search program. After an employment offer, the employer will apply for work permit.                                                                                                      |

## Perspectives

## Higher Education News around the Globe

### Top French Business School, ESSEC business School, launches in Mumbai



**Top French business school launches Mumbai hub in India push**  
ESSEC Business School, a grande école in France, has launched its third international hub in Mumbai.

The PIE News / Mar 17

<https://thepienews.com/top-french-business-school-launches-mumbai-hub-in-india-push/>

- ESSEC Business School has launched a new international hub in Mumbai to strengthen its engagement with India and expand academic collaborations.
- The Mumbai hub is ESSEC's third global hub, after locations in London and New York.
- The initiative aims to build partnerships with Indian universities, companies, and innovation ecosystems.
- It will support student mobility, executive education, and joint research initiatives between India and France.
- The launch reflects France's broader strategy to deepen education ties with India and attract more Indian students.
- The hub also strengthens ESSEC's long-term presence in one of the world's fastest-growing higher-education markets.

### Ireland: Fourth Straight Year of International Enrolment Growth

- International student enrolment in Irish higher education rose by about 10% in 2024/25, reaching nearly 45,000 students, the highest on record.
- This marks the fourth consecutive year of growth for the sector.
- Indian students are the largest international cohort, increasing by roughly 30% year-on-year.
- The US remains the second-largest source market, also continuing to grow.
- Growth reflects strong demand for Irish postgraduate programmes and favourable study-work opportunities.

<https://monitor.icef.com/2026/03/irish-higher-education-reports-a-fourth-straight-year-of-foreign-enrolment-growth/>



**Irish higher education reports a fourth straight year of foreign enrolment growth**

The number of international students enrolled in Irish universities has been growing steadily from a COVID-era dip in 2020/21. The latest data from Ireland's Higher Education Authority (HEA) confirms that 2024/25 marked a fourth straight year of ...

ICEF Monitor / Mar 19

### India's Rising Dominance in Higher Education



**India's dominance in higher education grows: How records are being set**  
Over the past four decades, India has made significant strides in expanding access to higher education for its youth, facilitating their transition from agriculture to the industrial and service sectors, while also reducing inequalities related to gender a...

MSN / Mar 18

- India is emerging as a major global higher-education hub, with growing influence in research, rankings, and academic collaboration.
- The country now has over 1,100 universities and 56,000+ colleges, one of the world's largest education networks.
- In the 2026 global rankings, 128 Indian institutions were listed, making India the second most-represented country.
- Research output and international recognition of Indian universities are steadily increasing.
- Policy reforms such as the National Education Policy (NEP) 2020 are accelerating innovation and quality improvement.

<https://www.msn.com/en-in/news/india/india-s-dominance-in-higher-education-grows-how-records-are-being-set/ar-AA1YSLbR>

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