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Preface

It is with great enthusiasm that we present Volume 1, Issue 2 of *New Explorations in Electrical Engineering* (NECE), the official journal of the Department of Electrical Engineering, Faculty of Engineering, Universiti Malaya. Following our inaugural release, this issue continues our commitment to fostering a vibrant research culture among faculty members and students while offering an open platform for technical advancement and knowledge sharing within the broader electrical engineering community. NECE remains dedicated to cultivating a research-driven environment, promoting rigorous academic discourse, and enhancing technical writing quality through constructive peer review and editorial guidance. The journal encompasses key disciplines in electrical engineering, including power systems, automation and control, photonics, computer engineering, signal and image processing, renewable energy, and materials science.

For Volume 1, Issue 2, we are proud to feature seven diverse research articles that highlight cutting-edge developments across photonics, computer vision, smart energy systems, and renewable technologies:

- **Photonics & Advanced Laser Systems:** Two contributions explore passive Q-switching in Erbium-Doped Fiber Lasers (EDFL) within the C-band region, evaluating novel materials and structural configurations—specifically a Tin Phthalocyanine-based saturable absorber and a D-shaped fiber coated with a Zn(II) Schiff-Base complex.
- **Computer Vision & Image Processing:** Researchers introduce a real-time text extraction framework for Malaysian road direction signs using dashboard camera footage, as well as an improved joint model utilizing adaptive regularization for low-light illumination enhancement.
- **Renewable Energy & Environmental Analytics:** Studies in green technology feature aesthetic micropatterned photovoltaic glass designed for net-zero energy building integration, along with a ResNet-based deep learning model applied to downscale ERA5 wind data for precise wind resource assessment in Ambon Island, Indonesia.
- **Smart Automation & Energy Efficiency:** An article on indoor lighting optimization presents a daylight-based illumination control framework tailored to improve energy management in public facilities.

We extend our sincere appreciation to the authors for choosing NECE to share their valuable findings, to the reviewers for their thorough evaluations, and to the editorial team for their tireless dedication. We hope this issue inspires further innovation and collaborative research, and we invite researchers, practitioners, and students to submit their work for our upcoming issues

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