

FACULTY OF ENGINEERING



"Scientists investigate that which already is; Engineers create that which has never been."

LEARN INSPIRE GROW BUILD INNOVATE CREATE LEAD DISCOVER



In this issue

Welcome	3
FOE in the News	.4
Student Happenings	5
Student Spotlight	6-11
Alumni Happenings	12
Staff Highlights	13
Faculty Happenings	16
Mona Engineering Society Corner	.17
2021 First Class Honourees List	.18

Prepared by:

Ms. Shanique Gray - Senior Administrative Assistant II, Mr. Rhoan Hibbert - Administrative Assistant II, Mr. Stephan Anderson - IT Officer

Welcome

Season's greetings! Welcome to this issue of the Faculty of Engineering, Mona quarterly newsletter. In addition to our website (www.mona.uwi.edu/engineering), this newsletter is our way of sharing the activities of the Faculty and highlighting the achievements of our valued students and staff.

In this issue, we continue to highlight the developments and activities of the Faculty during August to December 2021. Best wishes for a wonderful Christmas holiday and a happy New Year.

Message from the Dean

Firstly, I hope this message finds you safe and healthy.

I would like to welcome all new and returning students for the first semester of the 2021/2022 Academic Year. The faculty began the new Academic Year where it ended the last one; by continuing to deliver all its course lectures online. Laboratory and practical exercises however, commenced the first week of October. While many activities have slowed as a result of social distancing; our priority is to educate and train our students in a safe, healthy environment. Before long, life will return to normal, in the meantime we encourage everyone to remain positive.

The Faculty of Engineering extends congratulations to thirty students that were awarded the MSTVETT scholarship for this academic year! These students complement the current cohort of MSTVETT awardees who would have maintained good grades in order to retain their respective scholarships for another academic year. The MSTVETT scholarship is a full-scholarship that is awarded through the Ministry of Education, Youth and Information (MEOYI) to successful candidates, who wish to specialize in varying areas of teaching and in non-teaching specialized areas of Engineering. Thanks to the MEOYI for their continued support in making these funds available to our students. For more information on the MSTVETT scholarship, please visit: https://www.mona.uwi.edu/engineering/scholarships. We encourage more students to take advantage of this opportunity to finance their education.

Congratulations are also in order for five Faculty of Engineering students, along with six students from the Faculty of Science and Technology (FST), who successfully completed the recent CEMEX Campus II internship programme. This programme introduces students to the operations of the Cement Industry over a 3-week period and includes a tour of the Carib Cement Factory.

Forty-eight engineers graduated at The UWI's Virtual Graduation Ceremony held on Friday November 5, 2021, of which twenty-four were first class honors (18 Civil Engineers, 3 Biomedical Engineers and 3 Electronics Engineers). Hearty congratulations are in order for these students who worked hard throughout their tenure in the Faculty!

In this newsletter, the FOE shares some of the exciting discoveries and new knowledge generated in the last few months, while we highlight individual faculty accomplishments, we also recognize that there are many other stories to tell about the exciting work and teaching happening every day in the Faculty of Engineering, Mona.



Adrian Lawrence, PhD, P.E.; Dean, Faculty of Engineering, The University of the West Indies, Mona

FOE IN THE NEWS

New Fortress Energy Foundation Presents over \$26.5 Million Worth of Scholarships to Tertiary Students

On Wednesday, December 1, 2021, the New Fortress Energy's (NFE's) Annual Tertiary Scholarship Handover ceremony was held in the Council Room of The University of the West Indies (UWI), Mona Campus. Nineteen (19) UWI students received scholarships for the academic year 2021-2022, of which ten (10) students are within the Faculty of Engineering, UWI, Mona. A number of students from the University of Technology (UTECH) and Caribbean Maritime University (CMU) were also awarded scholarships. Three (3) student representatives were selected respectively from each of the three (3) universities to physically attend the handover ceremony, considering occupancy restrictions due to the COVID-19 pandemic. The Hon. Fayval Williams, Minister of Education, Youth and Information, was the keynote speaker for the event. Also present at the event were Ms. Verona Carter, (Vice President - New Fortress Energy), Professor Dale Webber (Pro Vice Chancellor and Principal, UWI), Professor Evan Duggan (Interim President, CMU), Mr. Oneil Josephs (Head of the Faculty of Engineering, UTECH), Dr. Omar Thomas (Deputy Dean, The Faculty of Engineering, UWI), Dr. Paul Aiken (CEO, Mona Tech Engineering) and Mrs. Jacqui Burrell Clarke (Director, Communications & Community Relations, NFE).

The Principal of The UWI Mona, Professor Dale Webber, welcomed everyone present and congratulated all the awardees of the NFE Scholarship. Prof. Duggan and Mr. Josephs also spoke and gave their respective congratulations to the students. Minister Williams outlined the significant contributions of New Fortress Energy to education in Jamaica, congratulated the awardees, and emphasized the need for more engineers! The symbolic handover of the scholarships was done with the presentation of a cheque in the amount J\$ 26,663,773.50. The Faculty of Engineering at The UWI Mona expresses gratitude to New Fortress Energy for these scholarships. This contribution will go a far way in allowing students to realize their dream careers, and will be a catalyst for producing more qualified tertiary level graduates that will enter the work force that can contribute to nation building!



From left: Professor Dale Webber (Pro Vice Chancellor and Principal, UWI), Kimberly Roye (Civil Engineering Student), Ajene Binns (Civil Engineering Student), Shanelle Dale (Civil Engineering Student), Hon. Fayval Williams (Minister of Education, Youth, and Information) and Ms. Verona Carter (Vice President - New Fortress Energy).

Student Happenings | > NewFortress Summer Internship Programme

Fourteen (14) Faculty of Engineering (FOE) students got the opportunity to participate in an exciting Summer Internship offered by New Fortress Energy (NFE) in June 2021! The sites for the internship were the NFE's Montego Bay Re-gassification Terminal, the Old Harbour Facility (St. Catherine) and Jamalco Co-Generation Power Plant (Clarendon). The duration of the internship was six (6) weeks, and the objective was to develop valued skills such as: teamwork, communication, and attention to details in the interns, which are all essential attributes of a professional engineer. In addition, the goal was to expose and expand the knowledge of the interns to specific areas of engineering that are associated with the Liquid and Natural Gas (LNG) industry.

The internship allowed the students to get a better understanding of the LNG process operations and maintenance. The interns were exposed to the safe handling of LNG; they got a greater understanding of the LNG's ship to the shore transfer, storage, re-gassification, truck refueling and truck offloading processes. The cohort of engineering students that participated in the summer internship consisted of nine (9) Electrical Power, Electronics and one (1) Civil Engineering students. The FOE students were able four (4) engineering knowledge gained during their course of study in the Faculty to apply the of Engineering at The UWI Mona on the Internship. They performed well and had an invaluable experience at New Fortress Energy that will certainly go with them wherever they go in their future careers!



Faculty of Engineering students (from left, in white): Giovanni Buckle (3rd yr. electrical power engineering student), Devan Miller (2nd yr. electrical power engineering student), Justin Taylor (3rd year electrical power engineering student). Two (2) employees (in blue) of New Fortress Energy.

Student Spotlight | International Energy and Sustainability Conference 2021 Awardees



From left: Dr. Omar Thomas (supervisor), Jerdene Fraser, Adrian Taylor, Brandon Brown, Jermaine Welcome and Antonia Lawrence.

Final-year Civil Engineering students won the student award at the International Energy and Sustainability Conference 2021 for the presentation entitled "Strategies for a National Campaign on eMobility", which is based on research work that they did on one of their capstone projects undertaken in the B.Sc. Civil Engineering programme. The presentation of the award was done in June 2021. The Principal Investigator and supervisor for the project was Dr. Omar Thomas, who was assisted by final-year civil engineering students Antonia Lawrence, Brandon Brown, Jerdene Fraser, Jermaine Welcome and Adrian Taylor.

The aim of this study was to assess the current state of the use of electric vehicles (E-vehicles) in Jamaica and to determine a strategy on the way forward. To accomplish this, many aspects of Electric Mobility (E-mobility) were assessed. Comparisons between traditional internal combustion engine vehicles and E-vehicles for different model sizes were explored, which included life-cycle cost analyses. An assessment of the current use of E-vehicles in Jamaica was also done. Recommendations for the strategies on implementing a shift to E-mobility were provided, including the suggested locations across the island for commercial charging stations and proposed policies to incentivize the use of e-vehicles as a part of a potential national campaign to reduce the nation's carbon footprint contributed through transportation. The research findings suggest that more needs to be done as it relates to policy, regulations for the import of E-vehicles and infrastructure to make the purchase and use of E-vehicles more attractive in Jamaica.

Student Spotlight | Innovation Genesis

Please allow us to introduce ourselves – we are Innovation Genesis (AKA: IGenesis), a Jamaican company with aspirations to move Jamaica forward to become the Wakanda (*the technologically advanced futuristic country from "Black Panther"*) of the Caribbean, by marshaling the tremendous talents, resourcefulness, intelligence, creativity and determination of Jamaicans. As our name suggests, we want to be the place where this innovative transformation starts. We believe we can predict what this future Jamaica resembles by creating it. Informed by our own personal experiences and fully aware that the formula for success has two components – internal (an individual's determination/drive) and an external (an environment of opportunity), we know that this generation of students can make it happen. Beyond our confidence in Jamaican youths, we believe that talent is distributed globally, but opportunities are not. We believe that technology can be used to remedy a lot of society's challenges. We believe in giving back and creating win-win outcomes.

It is these beliefs and values that drove and inspired three Jamaican born (Lincoln, Kevin and Richard) University of Rochester educated engineers to take on the audacious task of trying to reinvent Jamaica by promoting skills and providing opportunities that will give Jamaicans a chance at that "Jakanda" future. As was elegantly quoted by Thomas Edison (the man credited with inventing the light bulb and many other modern amenities that has improved our lives) - "thought without action is a hallucination". Mindful of this reality, in 2017, we took the first step on this long journey towards this "Jakanda future" by reaching out to Dr. Paul Aiken, Director of the Mona School of Engineering at UWI Mona, to start discussions about sponsoring student projects. Within the same timeframe, we registered Innovation Genesis in Jamaica.

After some discussion and an understanding of what could be achieved with this win-win partnership, the sponsorship was agreed to and launched with the tremendous work and guiding hands of Dr. Lindon Falconer. With this sponsorship, Innovation Genesis submitted design projects for inclusion in the list of Capstone Projects for final year students. The IGenesis projects aim to provide opportunities for students who want to have a potentially meaningful impact on Jamaica's future. The sponsorship and project are the first phase of something bigger.

The ultimate goal is to further assess these projects for viability. Can they be made into real products that can be manufactured locally in Jamaica and sold to local and foreign consumers? If yes, we want to help the students create business plans and launch small startups based on the products with the most potential. Students have the opportunity to win up to JM\$145,000 for first place, plus Innovation Genesis reimburses approved Bill of Materials. For viable and successful projects, students have an opportunity to gain start-up support. In addition, the knowledge gained from the process is more akin to an internship. Consequently, it gives students additional experience that they can add to their resumes or graduate school applications.

... Continued on page 8

Student Spotlight | Innovation Genesis

So far, since its inception, Innovation Genesis has sponsored the following projects:

- 1. Smart Farming
- 2. Non-chemical Energy Storage
- 3. USB phone charging kiosk
- 4. Integrated Sensing Street lights (an image of this project is shown below)
- 5. RF scavenger charger (2 images of this project are shown below)
- 6. Smart speaker Bluetooth receiver
- 7. Mailbox notifier

Six students have completed Innovation Genesis projects thus far, receiving US\$3,000 in bill of material reimbursements and J\$90,000 in awards.

Based on what has been achieved to date, we are well on the way to trying to reinvent Jamaica and getting to that "Jakanda" future. The original concept was to make the sponsorship a competition between colleges. We are happy to report that the competition is expanding to include Caribbean Maritime University this year. The plan is to expand to even more colleges in the future.

We are also mindful that no one has a monopoly on innovation, inventiveness or creativity, so IGenesis is also open to partnering with like-minded entities or playing a VC role for the right innovative company with unique and transformative product(s).



Different versions of the RF scavenger devices are shown on the left and right. The tablet in the center shows program code for a section of the website.



RF scavenger prototype on the right and web page from monitoring server on the left



Prototype of the Integrated sensing street light. Three different modules were built for the project.

Student Spotlight | Advanced Contactless Temperature Sensor Project

By: Members of the Institute of Electrical and Electronics Engineers (IEEE), The University of the West Indies Student Branch

The COVID-19 virus currently poses a threat to the lives of many individuals; therefore, all measures should be put in place to mitigate the spread of this deadly disease. Unfortunately, testing if someone has this virus is not a straightforward process that can be easily automated. Therefore, detecting the symptoms of this disease may indicate if the person has contracted the virus. One of the tell-tale signs that a person has COVID-19 is their temperature, as a fever sometimes accompanies it.

This project aims to design and implement a contactless system that automates the process of measuring a person's temperature and using this as an indicator for the presence of some illness, especially COVID-19. In addition, a web interface is developed to enable wireless monitoring of the device's measurements. The device will also store the data on a locally installed SD card.

Development Team

The development team consisted of staff members and Electronics Engineering students from the Faculty of Engineering, The University of the West Indies, Mona. All participants were members of the Institute of Electrical and Electronics Engineers (IEEE) student branch.

Design

Figure 1 shows the Gerber file viewer of the printed circuit board (PCB) and Figure 2 shows the view of the 3D enclosure's design.



Figure 1: Image of PCB for the COVID-19 Contactless Temperature Measurement Device

... Continued on page 10

Student Spotlight | Advanced Contactless Temperature Sensor Project



Figure 2: Enclosure Design

Complete Solution

The below pictures show the prototype at different angles. The welcome screen displays after power-up and temperature measurement.



... Continued on page 11

Student Spotlight | Advanced Contactless Temperature Sensor Project



Figure 3: View of Prototype from a different angle and during operation

Data Storage on SD Card

During the operation of the device, a new file was created for each day. The collected data was stored in each file immediately after measurement.

Website

The data collected by the contactless temperature sensor device was sent to a web server using communication over a Wi-Fi network, after which it is stored in a database. A user can view the stored data using a web interface.

Future Work

One of the aims of this project was to write and publish a technical paper. Future work will be conducted to compare the accuracy of five different contactless temperature sensors measuring the temperature of objects at various distances. Then a decision will be made as to which sensor is most suitable for the device.

Acknowledgements

The IEEE UWI student branch project team would like to thank the IEEE Region 3 for funding this project. We also thank the IEEE Jamaica section executive, led by Madam Chair Erica Simmons, for facilitating the money transfer and providing feedback and encouragement during the design and implementation phases.

Alumni Happenings | "The More You Know" Webinar Series

Faculty of Engineering Alumni Association Mona





Why?

Becoming a well-rounded adult has a lot more to it for students, than just being able to complete the course work and exams given. It takes both wisdom and knowledge where wisdom is gained though experience. *"The More You Know"* webinar series, is catered to the young graduate who has gained traditional knowledge for their career path but still lacks the street smarts needed to navigate any of life's administrative, professional or personal hurdles that may be thrown their way.

What?

Generally, *"The More You Know"* series aims to educate persons on any topic that seems to be skirted by the traditional education pipeline. Information that tends only to be gained when a person is thrust into a situation and learning on the fly is the only way to survive. These topics include but certainly are not limited to:

- Personal/Business Taxes
- Owning a Home
- Personal Finance
- Interactions on a site
- Pay Expectations

A person may simply summarize and say that the series gives "Life Advice". We openly invite anyone who would deem the information useful, so we encourage our alums to share with everyone.

When?

We have already successfully done two webinars. The first webinar titled "Insuring Your Future" relayed advice towards Personal Finance, where we invited two Financial Advisors to share any burning advice they had for young professionals then making themselves available for any questions persons had prior to the meeting or during the meeting. Though this meeting was geared towards understanding insurance, as discussions continued, it became a wealth of knowledge for Personal Finance overall. The second webinar was geared towards understanding the requirements and procedures needed to own a home, appropriately being titled "Putting the Real in Real Estate". We had Brittany Ffrench, a young and successful real estate agent, demystify the home purchase process while giving any tips and tricks that would aid the processes.

Aim

We have had positive feedback from the alums and visitors each time a webinar is hosted and we aim to have this series stretch beyond just the current executive body, as we can see the blatant need for information like this. We also aim to improve the advertisement of these webinars, so that the reach of the FEAAM network can be broadened.

STAFF HIGHLIGHTS

Lindon Falconer successfully defended his PhD thesis entitled "Predicting the intelligibility of speech and speakers as perceived by Sensorineural Hearing-Impaired listeners in noise." on June 17, 2021.

Dr. Falconer graduated with a PhD in Electronics and Computer Systems Engineering with High Commendation.



Lindon Falconer, PhD Lecturer and Head of Program, Electronics Engineering

Congratulations to the first cohort of PhD graduates from the Faculty of Engineering, Mona!



Da-Vaugh Sanderson, PhD Lecturer, Biomedical Engineering Da-Vaugh Sanderson successfully defended his PhD thesis entitled "Remediation of Cadmium in farm soil using an Integrated Cadmium Extraction System (ICES) " on April 29, 2021.

Dr. Sanderson graduated with a PhD in Biomedical Engineering.

New Publications



Professor Haniph Latchman *Electronics Engineering*

- Haniph A. Latchman, Signals and Systems and their Applications A transform-based Approach, John Wiley and Sons, November 2021.
- Asundi, S.; Fitz-Coy, N.; Latchman, H., Evaluation of Murrell's EKF-Based Attitude Estimation Algorithm for Exploiting Multiple Attitude Sensor Configurations. Sensors 2021, Vol. 21 No. 19, Special Issue on Attitude Estimation Based on Data Processing of Sensors, pp 1-23, October 2021, https://www.mdpi.com/1424-8220/21/19/6450



Dr. Rakhee, *Electronics Engineering*

- Madhushalini, Rakhee" Complexity Analysis of Wireless Body Area Networks using soft computing Technique", sixth International conference on Information and Communication Technology for Competitive Strategies, Dec 17-18, 2021, Jaipur, India, Indexed by SCOPUS, IN-SPEC, WTI Frankfurt eG, zbMATH, SCImago, Web of Science.
 - All ICTCS 2021 presented papers will be published in conference proceedings by Springer LNNS. ISSN: 2367-3370, Series.

Congratulations

Mr. Dennis Douglas

Laboratory Technologist, Civil Engineering

 Awarded 3rd Place in the Ministry of Economic Growth and Job Creation Low Cost Housing Design Competition – Three (3) Bedroom Category; selected from a pool of over 300 applicants across all categories



Congratulations

Dr. Leighton Ellis,

Deputy Dean

 Appointed to serve on the Jamaica Institution of Engineers (JIE) Council as the chairperson for the Civil Division for 2021-2022

Dr. Nicolas McMorris,

Head of Civil Engineering & Deputy Dean

- Appointed to the UWI TEC committee.
- Appointed to the Accreditation committee of PERB.

Staff Updates

FOE EXTENDS A WARM WELCOME TO:

- **Dr. Mellesia Lee,** Lecturer in Biomedical Engineering
- Mr. Ramone Jackson, Lecturer in Engineering Mathematics I & II
- Mr. Robert Beharie, Lecturer in Electrical Power Engineering

FACULTY HAPPENINGS

The Faculty of Engineering (FOE) was a proud participant in **The UWI Mona Campus World Quality Week 2021 (WQW21) Celebrations** under the theme, *"Sustainability: improving products, people and planet."*

The UWI, in alignment with the Chartered Quality Institute (CQI) designated November 8th to 12th as World Quality Week. The CQI expanded on Quality Day which normally would have been celebrated on November 11th only. This year, each of the five campuses was given a day for its celebration with the Mona Campus celebration designated for November 12th. The Quality Policy which sets out the means by which The UWI achieves and maintains quality in all our operations is the driving force behind the celebration.

Team FOE joined other faculties, through short video presentation, in showcasing, as outlined below, its contribution to the implementation of The UWI Quality Policy:

- Team FOE is prize winner at a forum entitled "A Quality Conversation with the PVC" held March 2019 to heighten awareness of The UWIQP2017, the new UWI Quality Policy 2017
- Team FOE acknowledges its growth and development from the BSc Electronics Engineering programme in the Department of Physics in the Faculty of Science and Technology (2009), to an evolution into the Mona School of Engineering (MSE, 2013), and subsequent operationalization of the Faculty of Engineering (FOE, 2018), with a key focus on its mandate which includes, helping to produce 1,000 engineers per year in support of national development goals
- Team FOE undertakes a number of impactful initiatives that contribute to the focus of the WQW21 theme, "Sustainability: improving products, people and planet":
- ⇒ **improving people** through birthday appreciation and special achievement recognition;
- ⇒ **improving people** through a strong staff and student professional development programme;
- ⇒ improving products through the successful launch of a campaign to receive US-based ABET (programme) accreditation for its first eligible programme, the BSc Electronics Engineering programme which gives the programme and the wider teaching & learning and research & outreach efforts in the Faculty, a special global appeal;
- \Rightarrow **improving products** as staff and students excel locally and abroad, pioneering innovative products and leading research that will have a lasting positive impact on the planet for generations to come;
- ⇒ **improving planet** with the support of industry partners such as New Fortress Energy through their internship programme, where our student engineers have found their niche as champions of environmental sustainability and responsibility,
- \Rightarrow **improving planet** by reducing the carbon footprint through small steps, big impact initiatives, including engagement in paperless meetings since the post COVID-19 period.

Access to Team FOE's short video presentation and the entire Virtual UWI Mona Campus World Quality Week 2021 Celebrations is available at:

https://www.youtube.com/watch?v=DvyOFZbfMxE&t=3244s

FOE Student Society Corner

MES Sibling Programme

The Mona Engineering Society's annual *Sibling Programme* was officially launched on November 2, 2021. Currently, the program comprises of five Preliminary engineering, eighteen first years, thirteen second years and six third year students. Second and third year students serve as older siblings to the first year and Preliminary engineering students.

The aim of the Sibling programme is to foster relationships among students and to assist first time engineering students with the transition into their respective disciplines. This programme will last for the 2021-2022 academic year. An official check-in will be done at the end of the first semester.

> On November 13, 2021 seventeen members of the Mona Engineering Society ventured to Palisadoes Beach (specifically End of Rocks) for their annual coastal clean-up initiative. Of the seventeen participants, there executive were MES nine members and eight other engineering students of various disciplines and years. All Covid-19 protocols were observed.

Special thanks to our sponsors and collaborators:

- FOE Administrators for arranging transportation.
- Jamaica Environment Trust for supplying clean-up kits.
- Wain's Tailored Food for sponsoring refreshments.
 NSWMA for collecting the refuse promptly.

Mona Engineering Society (MES) Corner









View beach clean-up video at: https://www.instagram.com/ tv/CWT-1DMIavI/?utm_source=ig_web_copy_link

2021

EAN-UP

G

BEACH

Anderson, Kymani Andruw

GRADUATING CLASS OF 2021 FIRST CLASS HONOREES

Congratulations to the Faculty of Engineering, Mona Graduating Class of 2021! Arnold, Matthew Antonio Beharie, Cady Olivia Brown, Brandon Karrick Antoine Brown, Kinisha Campbell, Alick Alfanso Donald, Taneille Elise Elliston, Shanae Olivia Fraser, Jerdene Ann-Marie Harris, Xavier Andre Desmond Henry, Yackesha Melissa Hewitt, Aisha Latifah Jones, Sherryahna Alliece Lawrence, Antonia LaBonte Madden, Jordan Alexander McConnell, Joel Audley McPherson, Ashley Amanda Molloy, Tamera Peta-Gay Murray, Lesmar Chyon Robinson, Tariq Adam Sharpe, Lawayne Ronaldo Alton Simpson, Rassanie Anthony Taylor, Adrian Nathan Taylor, Brittany Sunell Wilson, Alea Andrene Wright, Steven Jon Vincent

Biomedical Engineering Civil Engineering Biomedical Engineering Civil Engineering Civil Engineering Electronics Engineering Civil Engineering Biomedical Engineering Civil Engineering Civil Engineering Civil Engineering Biomedical Engineering Civil Engineering Civil Engineering Electronics Engineering Electronics Engineering Civil Engineering Biomedical Engineering Civil Engineering Civil Engineering

Contact our Office

4 St. Johns Close The University of the West Indies, Mona Campus, Jamaica W.I.

Tel: (876) 927-1640 / (876) 970-1964 Ext: 2204 / 2254 / 3901 / 3902 Fax: (876) 702-4307 Email: engineering@uwimona.edu.jm Queries: engineering.request@uwimona.edu.jm

To keep up to date on happenings in the Faculty of Engineering, Mona please feel free to visit our online platforms:

@UWIMonaEngineering

@MonaEngineeringSchoo

@MonaEngineering

Prepared by Shanique Gray (Senior Administrative Assistant II), Rhoan Hibbert (Administrative Assistant II) and Stephan Anderson (IT Officer)