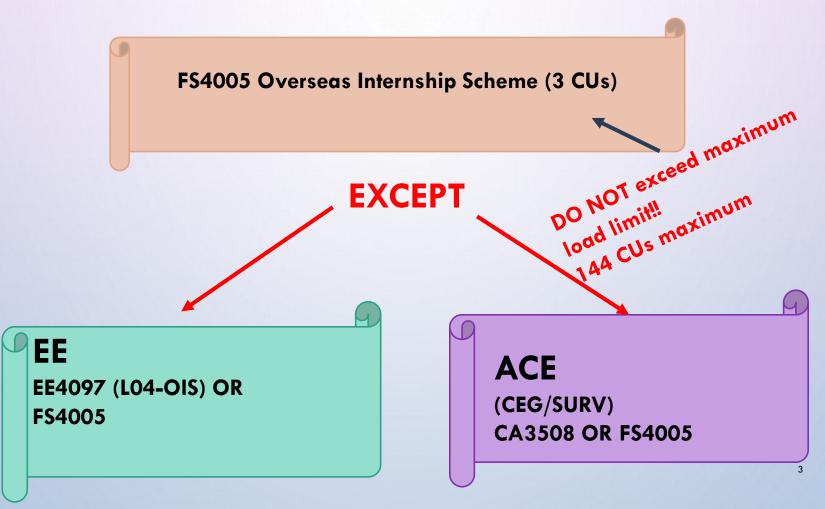


1 DECEMBER 2023 2:30 – 3:30 PM MAIDIE LO COLLEGE OF ENGINEERING

AGENDA

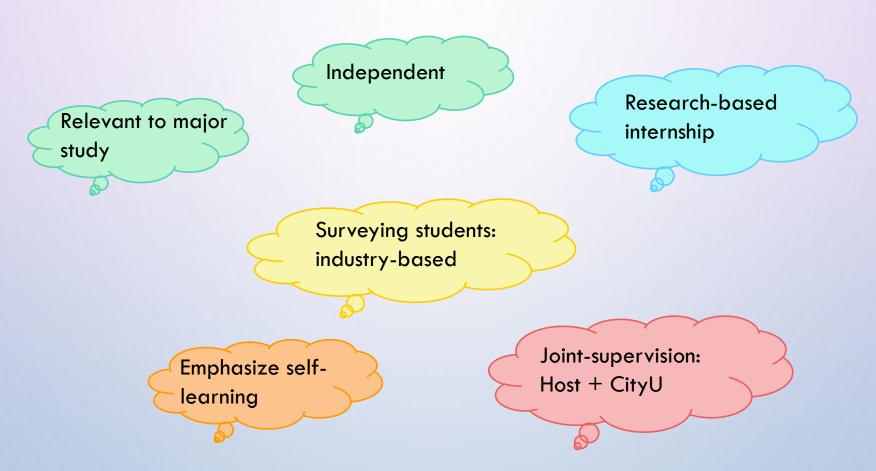
- FS4005 OVERSEAS INTERNSHIP SCHEME
- ELIGIBILITY
- ADVANTAGES
- ASSIGNMENTS
- FINANCIAL SPONSORSHIP
- OTHER POSSIBLE FINANCIAL SUPPORT
- APPLICATION PROCEDURES

FS 4005 Overseas Internship Scheme (OIS)



- 3 CREDIT UNIT ELECTIVE COURSE
- SUMMER TERM
- RESEARCH-BASED
- EXCEPT FOR SURVEY STUDENTS
- NON-REMUNERATED, EXCEPT RLB & TSMC
- 10-12 WEEKS BETWEEN LATE MAY TO MID-AUGUST
- EXACT PERIOD AS CONFIRMED BY HOST SUPERVISOR
- CO-SUPERVISE WITH CITYU SUPERVISOR

What to learn ?

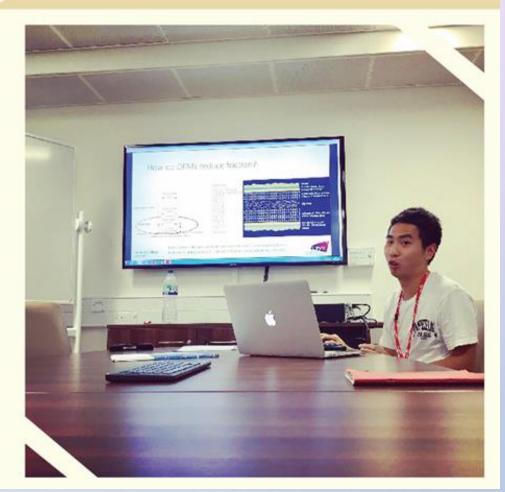




Department of Mechanical Engineering

Matthew CHUI under the supervision of Dr Janet WONG of the Imperial College London has contributed to a paper as the second author during his overseas internship at Imperial College. The paper, entitled Interactions between Organic Friction Modifier Additives, has been accepted for publication by *Tribology International*.

Student achievement



Tribology International 151 (2020) 106438



Contents lists available at ScienceDirect

Tribology International

journal homepage: http://www.elsevier.com/locate/triboint



Interactions between organic friction modifier additives^{*}

Benjamin M. Fry^a, Mang Yin Chui^b, Gareth Moody^c, Janet S.S. Wong^{a,*}

^a Department of Mechanical Engineering, Imperial College London, London, SW7 2AZ, UK
 ^b Department of Mechanical Engineering, City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Hong Kong
 ^c Croda Lubricants, Croda Europe Ltd, Cowick Hall, Snaith, East Yorkshire, DN14 9AA, UK

ARTICLE INFO

Keywords: Boundary lubrication Additives Friction

ABSTRACT

The interactions of different additives in engine oils can create synergistic or antagonistic effects. This paper studies how mixing different organic friction modifier additives affects friction reducing properties of lubricants in the boundary lubrication regime. Amines of different degree of saturation were mixed with either glycerol monooleate (GMO) or oleic acid in hexadecane. The model lubricants thus formed were characterised with Fourier-transform infrared spectroscopy. Friction tests in reciprocating motion using ball-on-disc steel-steel contacts were conducted to examine the tribological performance of these lubricants. Worn surfaces were examined using X-ray photoelectron spectroscopy. Oleic acid and oleylamine, a primary amine, were found to form a partial ionic liquid, providing synergistic friction reduction. This positive interaction reduces with increasing degree of saturation of the amine. No synergistic effect was observed between GMO and oleylamine, suggesting that GMO does not hydrolyse into a carboxylic acid within a rubbing contact in the presence of amine.

STUDENT ACHIEVEMENTS OIS 2021 (ONLINE)

- A BME STUDENT 'S INTERN WORK HAS BEEN PUBLISHED ON SCI JOURNAL WEBSITE
 - HTTPS://WWW.MDPI.COM/1422-0067/22/23/12669.
 - THE IMPACT FACTOR IS 5.924
 - (HTTPS://WWW.MDPI.COM/JOURNAL/IJMS), WHICH IS DECENT!

Open Access Article

In-Situ Synchrotron SAXS and WAXS Investigation on the Deformation of Single and Coaxial Electrospun P(VDF-TrFE)-Based Nanofibers

by \bigcirc Yi-Jen Huang ^{1,*} \boxdot \bigcirc \bigcirc Yi-Fan Chen ^{2,*} \checkmark , \bigcirc Po-Han Hsiao ³ \checkmark , \bigotimes Tu-Ngoc Lam ^{3,4,*} \checkmark , \bigotimes Wen-Ching Ko ⁵ \checkmark , \bigotimes Mao-Yuan Luo ³ \backsim , \bigotimes Wei-Tsung Chuang ⁶ \backsim \bigcirc , \bigotimes Chun-Jen Su ⁶ \backsim , \bigotimes Jen-Hao Chang ¹ \checkmark , \bigotimes Cho Fan Chung ⁷ \checkmark and \bigotimes E-Wen Huang ³ \backsim \bigcirc

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³ Department of Materials Science and Engineering, National Yang Ming Chiao Tung University, Hsinchu 30010, Taiwan

- ⁴ Department of Physics, College of Education, Can Tho University, Can Tho City 900000, Vietnam
- ⁵ Central Region Campus, Industrial Technology Research Institute, Nantou 54041, Taiwan
- ⁶ National Synchrotron Radiation Research Center, Hsinchu 30076, Taiwan
- ⁷ Department of Biomedical Engineering, City University of Hong Kong, Hong Kong 999077, China
- Authors to whom correspondence should be addressed.

International Journal of Molecular Sciences

International Journal of Molecular Sciences is an international, peer-reviewed, open access journal providing an advanced forum for biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry, and is published semimonthly online by MDPI. The Australian Society of Plant Scientists (ASPS), Epigenetics Society, European Calcium Society (ECS), European Chitin Society (EUCHIS), Spanish Society for Cell Biology (SEBC) and Signal Transduction Society (STS) are affiliated with IJMS and their members receive a discount on the article processing charges.

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- High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and many other databases.
- Journal Rank: <u>JCR</u> Q1 (Biochemistry & Molecular Biology) / <u>CiteScore</u> Q1 (Inorganic Chemistry)
- Rapid Publication: manuscripts are peer-reviewed and a first decision provided to authors approximately 14.3 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2021).
- Recognition of Reviewers: reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.
- Testimonials: See what our authors say about the IJMS.
- · Companion journals for IJMS include: Biophysica, Obesities, Stresses and Lymphatics.

Impact Factor: 5.924 (2020) : 5 Year Impact Factor: 6.132 (2020)

ASSIGNMENTS

Pre-attachment Training – Compulsory	Time Frame			
Pre-departure Briefing	14 May (Exact date to be announced)			
Workshop on Internship Preparation + Cultural Awareness				
Assignments - Compulsory	Deadline			
Progress report (Template will be provided) (>600 words, by email, to CityU supervisor cc College Office)	30 Jun			
Final report (Template will be provided) (>600 words, by email, to CityU supervisor cc College Office)	15 Aug			
eflective essay (>1000 words, by email) Including 10 representative photos (5 at work and 5 outside work with captions) A 1-minute video capturing the essence of OIS Summary Expenses and Tips to Future OIS Participants				
Project Presentation				
• To Host Supervisor	Before you return			
 To CityU supervisor – Compulsory 	After you return (Last week in August and before Sem A starts)			
Debriefing - Compulsory				
Post Internship Debriefing	30 August (TBC)			

ELIGIBILITY

- PENULTIMATE YEAR STUDENTS
- CGPA AT OR ABOVE 2.50

- PREFERABLE 2.7 OR ABOVE
- STUDENT ON OUTBOUND EXCHANGE DURING SEMESTER B IS NOT ADVISABLE TO APPLY
- OIS COMMENCES FROM LATE MAY TO EARLY JUNE.
- NON-NEGOTIABLE START DATES DECIDED BY
 HOST

UNIVERSITY SUBSIDY





-TSMC & RLB will provide a subsidy -CityU subsidy will be reduced in accordance with the guidelines

EXPENSES BORNE BY STUDENTS

- INSURANCE TO TAKE OUT TRAVEL AND MEDICAL INSURANCES POLICIES THAT WILL COVER COVID-19;
- VISA APPLICATION FEES;
- ACCOMMODATION
- REGISTRATION FEES AS VISITING STUDENT IF APPLICABLE;
- LABORATORY MATERIAL COSTS FOR IMPERIAL COLLEGE
 LONDON
- CHECK THE LIVING EXPENSES OF THE HOST COUNTRY BEFORE SUBMITTING AN APPLICATION

REACHING OUT AWARD (ROA)

• HKSAR GOVERNMENT SCHOLARSHIP FUND ADMINISTERED BY THE STUDENT DEVELOPMENT SERVICES ON A COMPETITIVE BASIS

- OIS PARTICIPANTS ARE ELIGIBLE (MAINLY FOR LOCAL STUDENTS)
- WILL ANNOUNCE BY YOUR PARENT DEPARTMENT BY FEB/MARCH
- APPLICATION VIA YOUR PARENT DEPARTMENT
- CEC WILL ENDORSE YOUR PARTICIPATION IN OIS
- NOT AFFECT YOUR SUBSIDY UNDER OIS

ITC STEM INTERNSHIP SCHEME SUMMER 2024

LOCAL STUDENTS ONLY

- SET UP BY THE INNOVATION AND TECHNOLOGY COMMISSION ("ITC")
- TO ENCOURAGE STEM STUDENTS TO GAIN INNOVATION AND TECHNOLOGY ("I&T")-RELATED WORK EXPERIENCE AND TO FOSTER THEIR INTEREST IN PURSUING A CAREER IN I&T AFTER GRADUATION
- FULL-TIME PLACEMENTS WITH DURATION OF AT LEAST FOUR CONSECUTIVE WEEKS (28 CALENDAR DAYS);
- OFFER MEANINGFUL I&T-RELATED WORK, SUBJECT TO THE VETTING OF THE UNIVERSITIES
- HK\$11,190 PER MONTH IN 2023
- DETAILS TO BE ANNOUNCED BY EARLY MARCH/APRIL

OIS VACANCIES

 HTTPS://WWW.CITYU.EDU.HK/CENG/CO-OPERATIVE-EDUCATION-CENTRE/OVERSEAS-INTERNSHIP-SCHEME-OIS/OIS-VACANCIES

FEEDBACK FROM PARTICIPANTS

How I am Benefited

	Ability of self-learning and problem
4	solving



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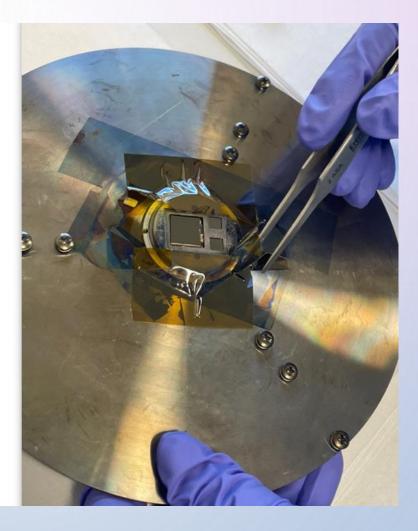
Ability of cooperation and communication

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Thinking independently and critically

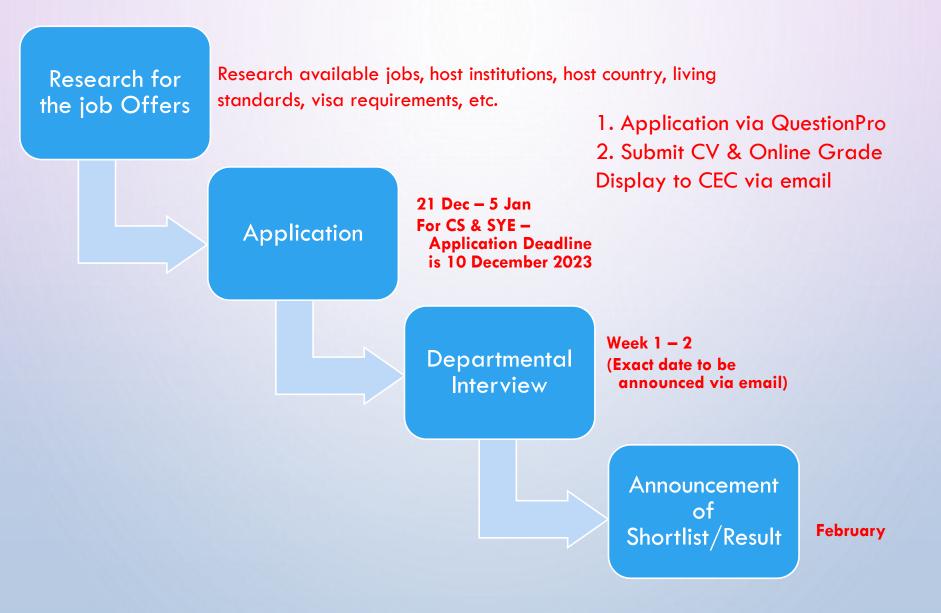


Improvement on related academic background



WANNA TO KNOW MORE?

OIS Workflow - Applicants



Acceptance & Registration



Research Project Preparation

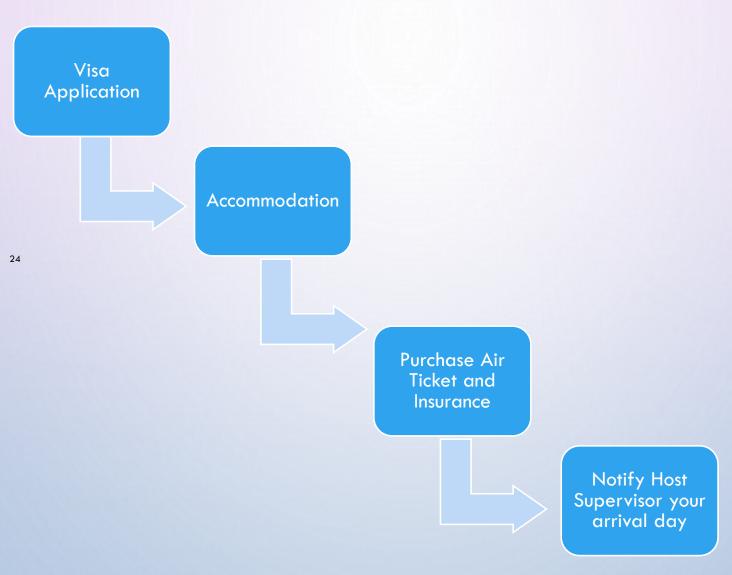
Host Supervisor & CityU Supervisor

- Introduce you to Host Supervisor & CityU
 Supervisor via email by April
- Learn about literature review

Host Supervisor

Meet with CityU Supervisor for Project Preparation

Trip Preparation



ACTION NOW

- IDENTITY THE PROJECT TITLES YOU ARE INTERESTED IN OIS WEBSITE:
- OVERSEAS INTERNSHIP SCHEME (OIS) | COLLEGE OF ENGINEERING (CITYU.EDU.HK)
- THE RESEARCH PROJECT CAN BE YOUR FYP
- CHECK OUT THE WEBSITE OF THE RESPECTIVE CONSULATE REGARDING THE VISA APPLICATION PROCEDURES, PROCESSING TIME, COSTS, DOCUMENTS REQUIRED, WHERE TO APPLY, ETC.
- RESEARCH THE LIVING EXPENSES IN THE HOST COUNTRY
- PREPARE A PRESENTABLE CV FOR CONSIDERATION OF HOSTS (EMAIL TO CEC WHEN YOU SUBMIT APPLICATION)
- CV- YOUR KNOWLEDGE, TECHNICAL SKILLS AND HANDS-ON EXPERIENCE AND ALL THE RELEVANT EXPERIENCES & COURSES.

²⁶ ABOUT SELECTION INTERVIEW

• INTERVIEW BY DEPT: WEEK 1-2

- GROUP INTERVIEW
- FAILURE TO ATTEND WILL BE TREATED AS WITHDRAWAL
- IF CLASHES WITH CLASS TIME, CO-OP CENTRE WILL ISSUE CERTIFICATION LETTER
- ASSESSMENT CRITERIA
 - TECHNICAL KNOWLEDGE
 - ACADEMIC PERFORMANCE
 - ATTITUDE
 - ENGLISH PROFICIENCY

ABOUT JOB MAPPING

- JOB MAPPING BASED ON :
- PERFORMANCE AT THE INTERVIEW & ACADEMIC
 PERFORMANCE
- JOB PREFERENCE
- CV & TRANSCRIPT TO HOST FOR CONSIDERATION
- EITHER ZOOM INTERVIEW OR PAPER SCREENING (INCLUDING STUDENT ON OUTBOUND EXCHANGE)
- HOST INTERVIEW: FROM FEBRUARY
- PREPARE WELL IN ADVANCE !

ABOUT OFFER & ACCEPTANCE

- HOST TO CONFIRM OFFER: FROM LATE FEB
- ACCEPTANCE : SIGN TO ACCEPT THE OFFER WITHIN 3 WORKING DAYS WITHOUT ALLOWANCE
- FAILURE TO REPLY BY THE DEADLINE WILL BE TREATED AS WITHDRAWAL
- SIGNING = COMMITMENT + CONSENT TO FS4005
 REGISTRATION OR EQUIVALENT COURSE IN SUMMER TERM
- WITHDRAWAL AFTER SIGNING → COURSE REGISTRATION
 + FAILURE OF THE COURSE

VISA & AIR TICKET

- APPLICATION OF VISA
- CITYU AND HOST WILL PROVIDE YOU WITH A CERTIFICATION LETTER FOR
 VISA APPLICATION BETWEEN MARCH AND APRIL
- TO NOTE IF ANY SPECIAL CONDITIONS DEMANDED BY YOUR HOME COUNTRY STAYING IN THE US OR OTHER COUNTRIES
- A US VISA IS REQUIRED FOR TRANSIT TO CANADA
- TAKE NOTE IF THERE IS ANY IMPLICATION ON THE DEVELOPMENT OF COVID-19
- AVOID SUBSTANTIAL FINANCIAL COMMITMENT UNLESS YOUR TRIP IS VERY LIKELY TO HAPPEN AS SCHEDULED

30 FURTHER INFORMATION

- MS MAIDIE LO
 - TEL: 3442 9148
 - EMAIL: MAIDIE.LO@CITYU.EDU.HK
- MISS STEPHANIE CHAN
 - TEL: 3442 6172
 - EMAIL: CHAN.STEPHANIE@CITYU.EDU.HK

- WEBSITE: HTTPS://WWW.CITYU.EDU.HK/CENG/CO-OPERATIVE-EDUCATION-CENTRE
- ADDRESS: CO-OPERATIVE EDUCATION CENTRE B 6502, YEUNG (LIFT8)



THANK YOU