EK5 : SURFACE COATING
CoRe : FMIA

Faculty Of Chemical Engineering
Universiti Teknologi MARA

TIER 5 – EK GROUP (EK)

Name of EK	**:**	**Surface Coating (SC)**
Tier	**:**	**5**
Leader	**:**	**Assoc. Prof. Dr. Junaidah Jai**
CoRe	**:**	**Frontier Materials & Industrial Application (FMIA)**
Registered Faculty	**:**	**Chemical Engineering**
Registration date (Senate Approval)	**:**	**16 April 2015**
UiTM Niche Area	**:**	**Advanced Manufacturing & Automation**
EK Niche Area	**:**	**Material science and engineering on surface protection.**

Background of Members

	Name of Leader & Members	Faculty	Qualification	Area of Expertise
	PM Dr Junaidah Jai	FKK	PhD	Corrosion inhibitor
	DR NORLIZA IBRAHIM	FKK	PhD	Separation, membrane
	DR ISTIKAMAH SUBUKI	FKK	PhD	Powder Metallurgy
	DR ANIZAH KALAM	FKM	MSc	Nanomaterial
	*PN NOORSUHANA MOHD YUSOF	FKK	MSc	Food coating
	*PN NORASHIKIN AHMAD ZAMANHURI	FKK	MSc	Separation
	*PN RAFEQAH RASLAN	FKK	MSc	Product from natural resource

* Study leave

SCRG ACHIEVEMENT(2015-2017)

PENCAPAIAN	2015	2016	2017
Master Degree – Enrolled/On-Going	16	19	20
Master Degree - Graduated	2	3	1
PhD – Enrolled/On-Going	5	8	8
PhD – Graduated	0	1	1
No. of research grants	5	4	4
Total value of research grants (RM)	378,000	266,808	266,808
Total publication (Indexed Journals)	12	7	11
Total publication (Non-indexed Journals)	4	1	2
IPR (Patent, Industrial design, Copyright)	0	3	1

OTHER ACHIEVEMENT SCRG (2015-2017)

ACHIEVEMENT	2015	2016	2017
NO. OF CONSULTANCY/ INDUSTRIAL LINKAGE/ COLLABORATION (National & International)	2	3	4
NO. OF MEMBERSHIP OF PROFESSIONAL BODIES AND ASSOCIATIONS (National & International)	7	7	7
NO. OF SPECIAL INVITATION/ APPOINTMENT/ EXPERTISE (National & International) incl. Keynote Speaker, Invited speaker, Thesis examiner, Judge, Reviewer, Panel, etc.)	14	14	14
NO. OF AWARDS/ RECOGNITION AND APPRECIATION (National & International)	3	2	2

Niche Area and Relevance of EK

Surface coating (SC) research group is formed to focus research on development of surface coating protection for various applications.

- Many activities emphasize on the following areas:

1. Development of corrosion inhibitor for metal protection.
2. Development of film coating material for food packaging incorporated with antimicrobial and antioxidant agents from plant extract.
3. Encapsulation of essential oil from plant extract to be used as antimicrobial and mosquito repellent in household products.
4. Development of palm leaves extract as reducing agent in the synthesis of nano-particle and recovery of precious metals from electroplating waste

SC Research Activities