INTRODUCTION  

Malaysia has a diverse flora and fauna most of which has not been fully discovered and exploited. In fact, its rainforest stores a huge collection of plant species which are the vital source for phyto-pharmaceutical, phytocosmetic and nutraceutical field. Currently in Malaysia, over 2,000 species of lower plants with medicinal and therapeutic properties have been identified and most of them have been used for many generations in various health care systems. They are also found in the wild and only a small number are cultivated. Some of these species (pegaga, kacip fatimah, hempted bumi etc.) have tremendous potentials to be cultivated and developed into various value added natural products. This phenomenon provides ample opportunities for local companies to embark on plant-based production and commercialisation sectors. Unfortunately, the development for upscale market uses is hindered by the lack of information on high technologies and skills available in Malaysia. In response to this, this course is aimed to cater the needs of disseminating information on various technologies for phytochemical processing to any related industries, which may include from herbal medicine, cosmetics to food industries.

OBJECTIVES

- Provide information on current status of phytochemical and herbal products
- Provide the latest information on product and process development trend to product formulators, scientists and process engineers
- Investigate fundamental and practical aspects of plant material handling, extraction, separation/purification and product quality
- Hands-on demonstration on processing techniques utilising semi-industrial scale process equipment
- Hands-on demonstration on cosmetic and herbal product formulations
- Develop business network among the herbal industry players

COURSE CONTENTS

1) Herbal Processing

- Global and Local Scenarios of Herbal & Phytochemical Industry | Prof. Ramlan Abd Aziz, Director of CEPP
- Introduction to Phytochemistry | Professor Dr. Hasnah Mohd Sirat, Faculty of Science, UTM
- Herbal & Phytochemicals Processing | Prof. Dr. Mohamad Roji Sarmidi, Dean RA Biotech, UTM
- Material Balance on Herbal & Phytochemical Processing | Sulaiman Ngadiran, Chemical Engineer, IBD
- Hands on Practical & Phytochemical Processing:
  i. Extraction: solvent extraction (soxlet); Water extraction
  ii. Spray Drying
- Question and Answer Session

2) Herbal Product Formulations

a) Lecture Sessions: Eastern herbs; Western Herbs; Modern Applications; Herbal Extracts; Herbs First Aid Kit; Emergency Aids Plus Therapy through Amino Acids; Herbal Preparations; Herbal Sources of Vitamins & Minerals
   Aromatherapy: Using Essential Oils for Health & Beauty Products

b) Practical Session: Product Formulation used traditionally to treat: Backache; Rheumatism; Arthritis, Asthmatic, Impotence; Facial Treatment; Body Treatment; Anti-wrinkle; Herbal Cream; Anti-pigmentation herbal cream; Herbal Slimming Gel and others

WHO SHOULD ATTEND ... 

Entrepreneurs, Scientists and Engineers working in the following industry:

- HERBAL
- NUTRACEUTICAL
- COSMETICS
- PHARMACEUTICAL
- FOOD and OTHER RELATED INDUSTRIES
COURSE TUTORS


**PROF. DR. MOHAMAD ROJI B. SARMIDI** | Prof. Dr. Roji is the Research and Development Manager of IBD (formerly known as Chemical Engineering Pilot Plant), Universiti Teknologi Malaysia, Johor Baharu, Johor. He graduated from University of Surrey, Guilford and holds a PhD degree from Aston University, Birmingham. His research interests include process intensification for environmentally sustainable processes and development of biorefinery for the production of phytochemical. He also has strong interest in chronology management and industrial development issues. He has carried out several consultancy projects in industrial development studies for the state of Terengganu, Johor and Pahang.

**PROF. DR. ROSNANI HAFSHAM** | Dr Rosnani Hasham has completed her PhD in Biochemical Engineering from Dongguk University South Korea related to Skin Barrier Function and Anti-photoageing ingredients. She also holds a Diploma in Aromatherapy and Holistic Massage from International Therapy Examination Council (ITEC), London. She has dedicated her career to the concepts of skin health and the development of aromatherapy techniques and formulations that help in restoring skin to its original health and beauty. She is currently IBD’s Research Associate, having been actively involved in R&D and commercialization of aromatherapy and cosmeceutical products for the past 14 years. She is also an advisor of Bakawali SPA at IBD, Universiti teknologi Malaysia. She has lectured and conducted courses all over Malaysia and has taught her technique and philosophy to hundreds of aromatherapy practitioners.

**MR. SULAMAN NGADIRAN** | Sulaiman Ngadiran is a Senior Research Chemical Engineer at the Institute of Bioproduct, with an expertise on herbal standardization and processing. He has a 14 years experience in both research and development and conducting contract manufacturing for herbal materials. Sulaiman has also worked with numerous SME’s, governmental agencies and entrepreneurs to consult and advise on bioproduct design and development.

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**COURSE FEE**

Fee is inclusive of lunch, refreshments and course materials. Accommodation is not included.

- **RM1450** per participant
- **RM435** per peserta kepada semua PKS yang layak mendapat 70% tajaan di bawah PSMB bagi Program Peningkatan Kemahiran EKS.

Untuk mendapatkan pengurangan yuran tersebut, PKS perlu mengemukakan dokumen berkenaan :

Syarikat Enterprise | SSM; Lesen Perniagaan; Penyata Bank terkini; Penyata KWSP terkini
Syarikat Sdn. Bhd. | Lesen Perniagaan; Borang 9; Borang 24 & 49; Penyata Kewangan Syarikat diaudit terkini; Penyata KWSP terkini dari KWSP

**REGISTRATION FORM**

**HERBAL PROCESSING & PRODUCT FORMULATIONS**
(Pemprosesan Herba dan Formulasi Produk)

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 - 13 January 2015</td>
<td>IBD UTM Johor</td>
</tr>
<tr>
<td>17 - 19 August 2015</td>
<td>IBD UTM Johor</td>
</tr>
</tbody>
</table>

YES ! I would like to register the following participants

Name 1
Job Title
Email

Name 2
Job Title
Email

Company Information
Company
Address
Town
State
Tel
Email

**AUTHORISED Signatory** (*This registration is invalid without signature from an authorised officer*)

Name
Job Title
Tel
Email

Signature

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**METHODS OF PAYMENT**

Please kindly complete and return the reply form together with

By cheque / Bank draft which are made payable to

PHYTO BIZNET SDN. BHD. (CIMB Bank Berhad)

**CANCELLATION & SUBSTITUTIONS**

A full refund will be promptly made for all written cancellations 2 weeks before the meeting. 50% refund will be made for written cancellations received 7 days before the meeting. A substitute may be made at any time.

Note

a) The organiser has the right to make any amendments that they deem to be in the best interest of the course and to cancel the course if insufficient registrations are received a week before course commencement date.

b) **CERTIFICATE OF ATTENDANCE** will be awarded at the end of the course.

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**70%**

daripada yuran kursus dibiayai oleh geran PSMB bagi syarikat PKS (mengikut tenaga & syarat)