UTHM
Universiti Tun Hussein Onn Malaysia

# "Achieving Teaching and Learning Objectives with ScienceDirect eBooks"


By

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Universiti Tun Hussein Onn Malaysia (UTHM)


# Webinar Outline

- UTHM's ScienceDirect eBook Collections
- UTHM's Support in Maximizing eBooks in Teaching & Learning
- My Experience using ScienceDirect eBook in Teaching & Learning
- Challenges & Overcome Strategies
- Q & A

ELSEVIER

# UTHM's ScienceDirect eBook Collections

Our ScienceDirect eBook Collections

Almost 10000 titles

WHY eBook?

Engineering

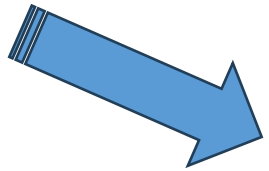
Chemicals engineering

Material Sciences

# UTHM's Elsevier eBook Collections

## Why Higher Education Institutions need to embrace eBooks?

1. Enable distance learning
2. Search and Learn
3. Economically more viable



Convenience

portable

save on space

24/7 access to information

# UTHM's Support in Maximizing eBooks in Teaching & Learning

## Systematic Approach by UTHM's Library

**Engagement Meeting with the Deans and Deputy Deans (Academic Affairs)**

**Workshop on Curriculum Review with Subject Expert**

**Integration of links of eBooks into Learning Management System**

Elsevier provided valuable support by training our lecturers to adopt the content in the curriculum and teach them how they can maximise their use of ScienceDirect eBooks.

# My Experience using ScienceDirect eBook in Teaching & Learning

## 1 eBooks as a main references (Lesson Plan)

### Before

| | | |
|---|---|---|
| 12. | **References** (including required and further readings): | 1. Serope, Kalpakjian and Schmid, Steven R. (2014). Manufacturing Engineering and Technology. 7th ed. Pearson. Call number: TS176 .K34 2014<br>2. Groover, Mikell P. (2007). Fundamentals of Modern Manufacturing: Materials, Processes and Systems. 3rd ed. John Wiley. Call number: TS183 .G76 2007<br>3. Rao P. N. (2009). Manufacturing Technology. 3rd ed. McGraw-Hill. Call number: TS183 .R36 2009 v.1<br>4. Schey, John A. (2000). Introduction to Manufacturing Process. 3rd ed. McGraw-Hill. Call number: TS183 .S34 2000 N1<br>5. Timings R. L., Wilkinson S. P. (2000). Manufacturing Technology. 2nd ed. Longman. Call number: TS176 . T55 2000 J2N1 |

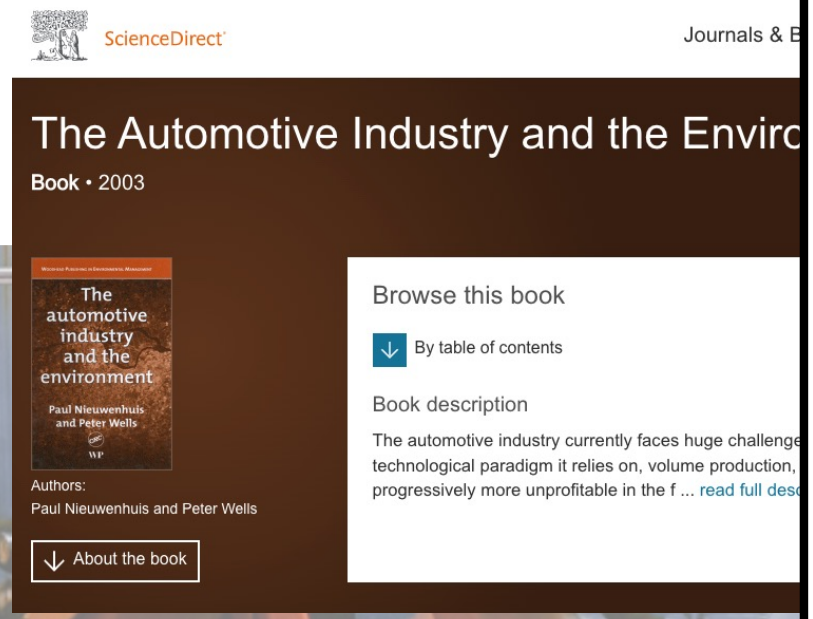
Library's Call No

# Example:

## BNG20402 Introduction to Automotive Industry

## Lecture plan

After

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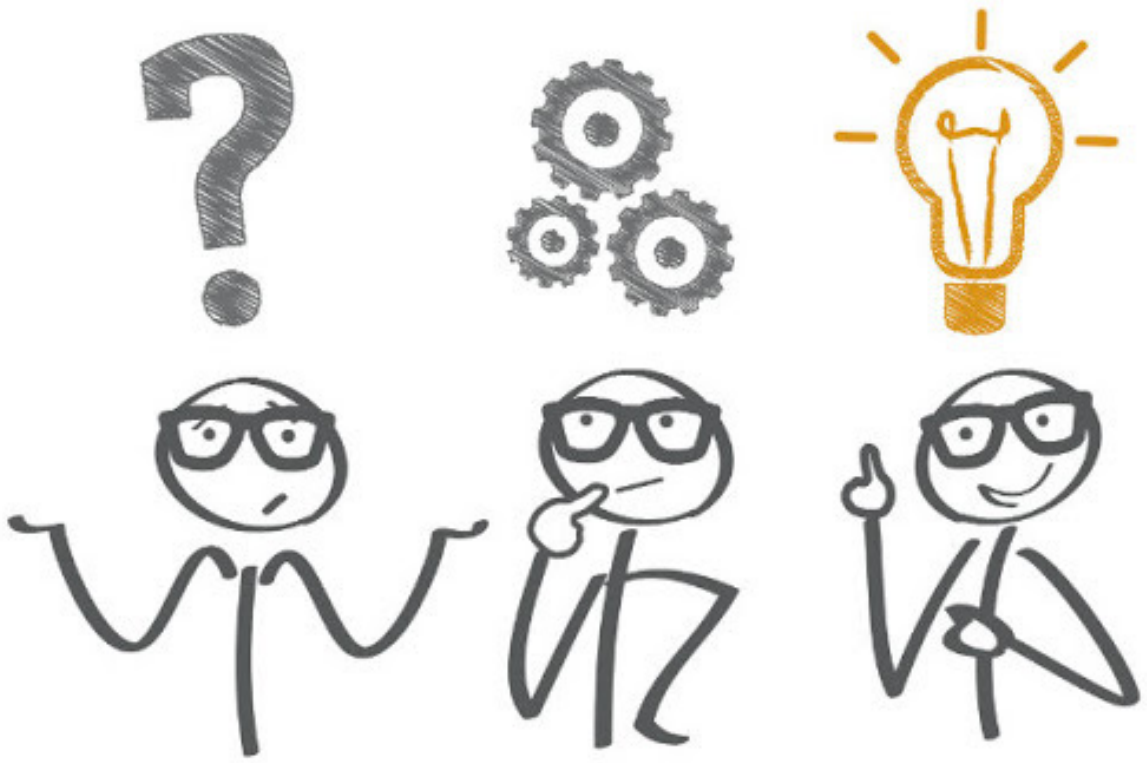
|---|---|---|
| 12 | **References (include required and further readings, and should be the most current (less than 5 years))** | 1. Sakthivel, R. et al (2019). Introduction to Automotive Engineering. John Wiley & Sons. https://app knovel-com.ezproxy.uthm.edu.my/kn/resources/kpIAE00013/toc?b-content-type=book&b-q=automotive&include svnonvms=no&q=automotive&sort on=default<br>2. Xu Wang (2020). Automotive Tire Noise and Vibrations: Analysis, Measurement, and Simulation. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128184097/automotive-tire-noise-and-vibrations<br>3. William B. Ribbens (2017). Understanding Automotive Electronics : An Engineering Perspective. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128104347/understanding-automotive-electronics<br>4. Paul Nieuwenhuis and Peter Wells (2003). The Automotive Industry and the Environment. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9781855737136/the-automotive-industry-and-the-environment<br>5. Huaihe Song et al (2022). Nanotechnology in the Automotive Industry: A volume in Micro and Nano Technologies. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780323905244/nanotechnology-in-the-automotive-industry<br>6. Hua Zhao (2007). HCCI and CAI Engines for the Automotive Industry. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9781845691288/hcci-and-cai-engines-for-the-automotive-industry<br>7. Joseph P. Greene (2021). Automotive Plastics and Composites: Materials and Processing; A volume in Plastics Design Library. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128180082/automotive-plastics-and-composites<br>8. Radhakanta Rana and Shiv Brat Singh (2017). Automotive Steels: Design, Metallurgy, Processing and Applications. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780081006382/automotive-steels<br>9. B. Ashok (2022). NOx Emission Control Technologies in Stationary and Automotive Internal Combustion Engines: Approaches Toward NOx Free Automobiles. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128239551/nox-emission-control- |

eBook Direct Link

# My Experience using ScienceDirect eBook in Teaching & Learning

## 2 Develop Instructional Material (Group Project)



PBL

Feasibility Study

Specified References

# Example:

## BNG20402 Introduction to Automotive Industry

## Group Project

UNIVERSITI TUN HUSSEIN ON
FACULTY OF ENGINEERING T
DEPARTMENT OF MECHANICAL ENGIN

**Group Project**
**Introduction to Automoti**
**(BNG 20402)**

**Instruction:**
As a project team that consists of **ONE (1)** project
engineer/technologist. Your team is required to conduct th
the following topics (refer in **Table 1** and select one topic
project with respect to National Automotive Policy 2020
(https://www.miti.gov.my/index.php/pages/view/nap2020

**Table 1**: List of technology developmen

| No | Project |
|---|---|
| 1 | Development of Advanced Electrode and Electr |
| 2 | Battery Charge, Mechanical and Thermal Mana |
| 3 | Lithium Ion Battery Module Packaging and Tes |
| 4 | Next Generation Battery Technology Roadmap |
| 5 | Lightweight Plastic Glazing for the Automotive |
| 6 | Lithium-ion Battery Material Manufacturing Scale up and Process Optimization |

**Project Delivery Expected Outcome**

*Written Report*:

- Written project technical report in Microsoft word (Times News Roman, 12pt, 1.5 spacing).
- Content of the report shall include the all the above items from Part A to E.
- 50% of the references MUST come from PTTA, UTHM resources especially from ScienceDirect

*Presentation*:

- Beside written report, you are required to perform a presentation **(video recorded)** at week 14. Each group members should involve in the project presentation.
- The **presentation slides** should be used during your group presentation and should be submitted together with the written report.

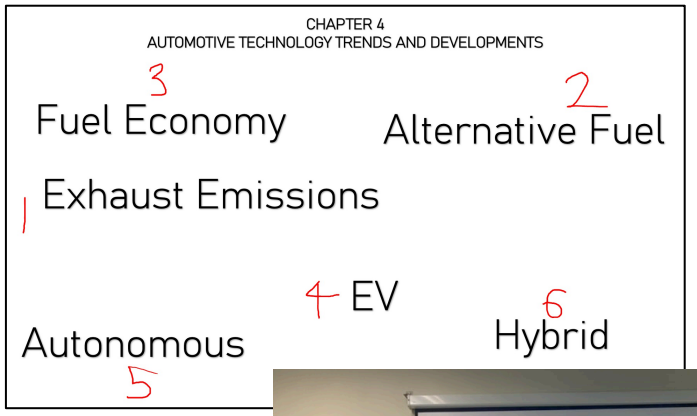
# My Experience using ScienceDirect eBook in Teaching & Learning

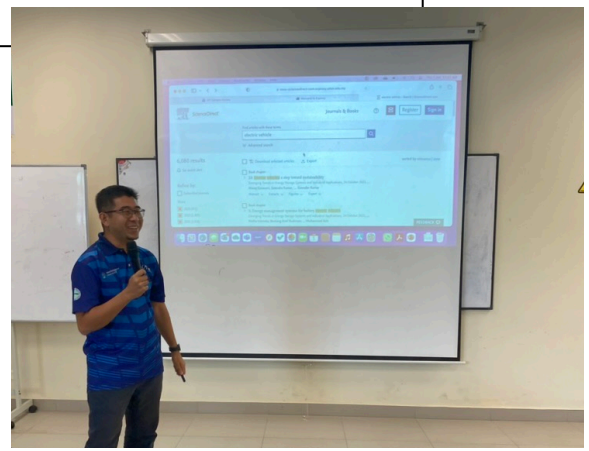
## 3 Learning activities using digital resources

# Example:

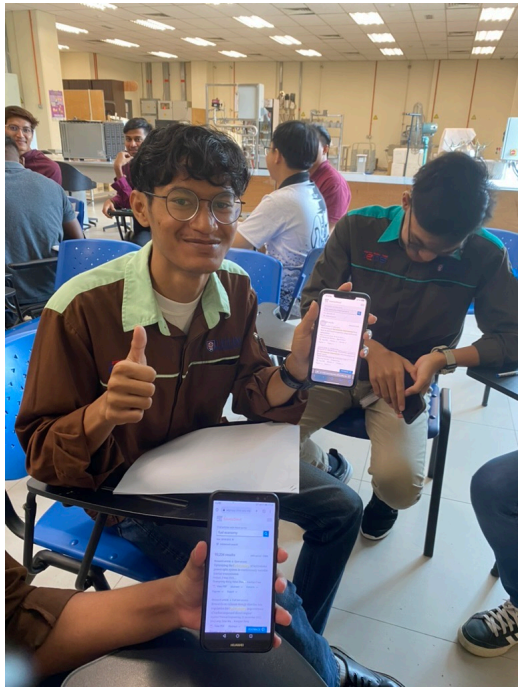
**Give students a keyword for them to explore in the ScienceDirect and do share in the classroom**

## Topics given



## Students explore resources in ScienceDirect database



# My Experience using ScienceDirect eBook in Teaching & Learning

## 4 Final Year Project: Industrial Based Project

# Example: Final year project

**RE-SIP : Research Enhanced – Structured Internships Programme**

**Improving Manufacturing Production of Mattress/Upholstery Products Using Lean Management Principles**

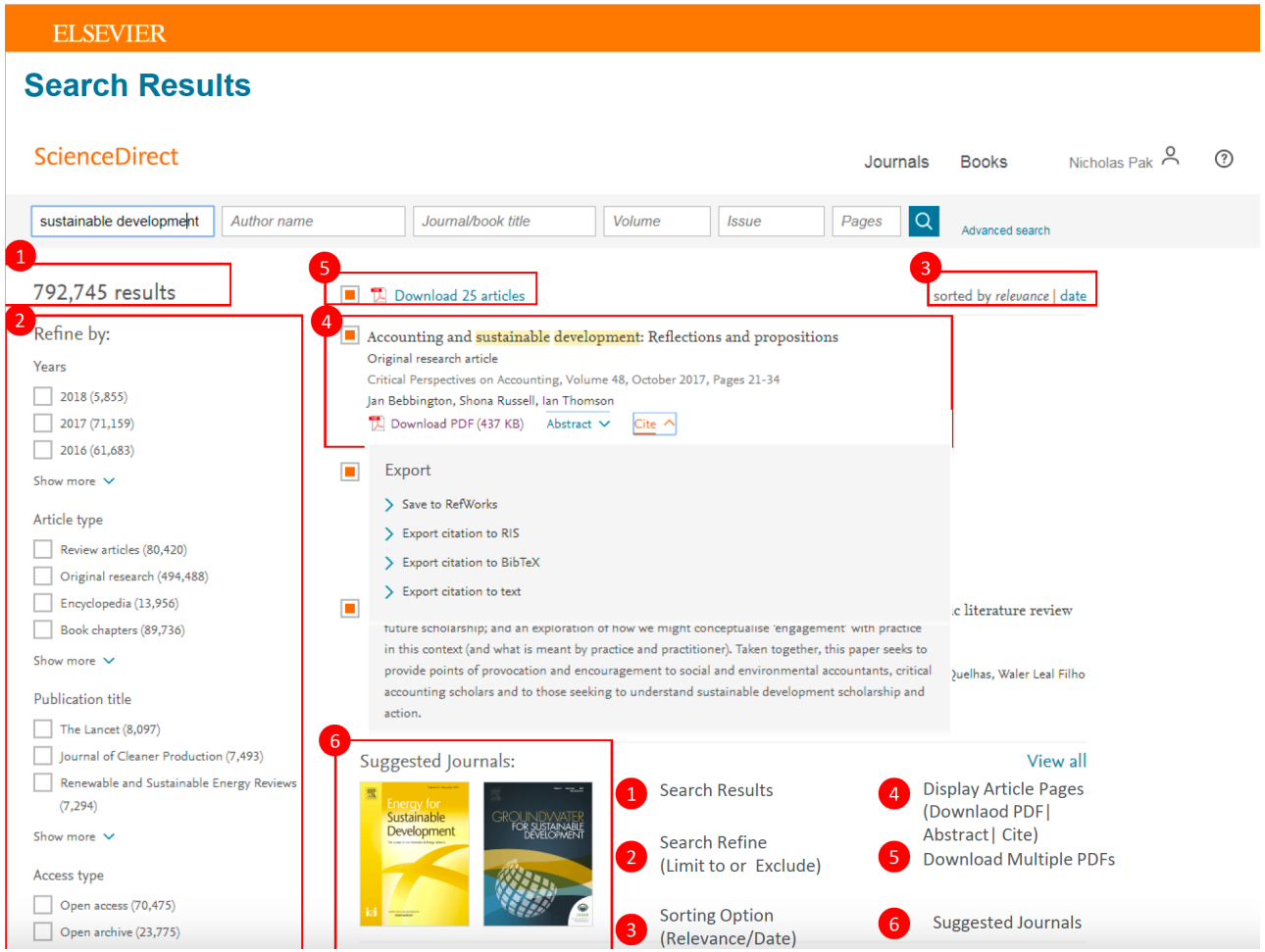

Eadeco SDN. BHD. (185678 - A) AKEMI

# My Experience using ScienceDirect eBook in Teaching & Learning

## 5 Demo ScienceDirect eBooks features in class

- Search Results
- Enhanced Reader
- Download Multiple PDFs
- ScienceDirect Topics

# ScienceDirect eBooks features: Search Results

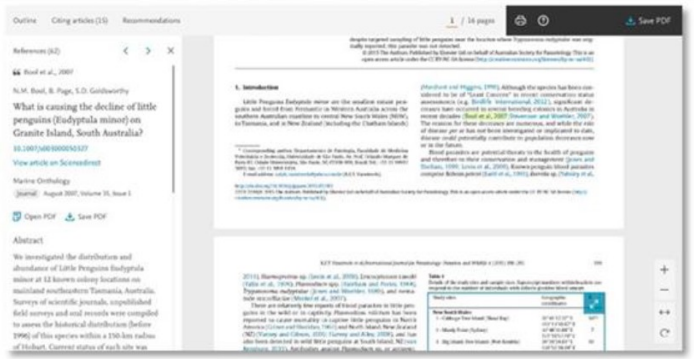


# ScienceDirect eBooks features: Enhanced Reader

## Enhanced Reader on ScienceDirect

**Author Data Integration**
Evaluate article, evaluate others, stay up-to-date, connect with the right

**Reference Linking**
Evaluate and read article, evaluate others, stay up-to-date



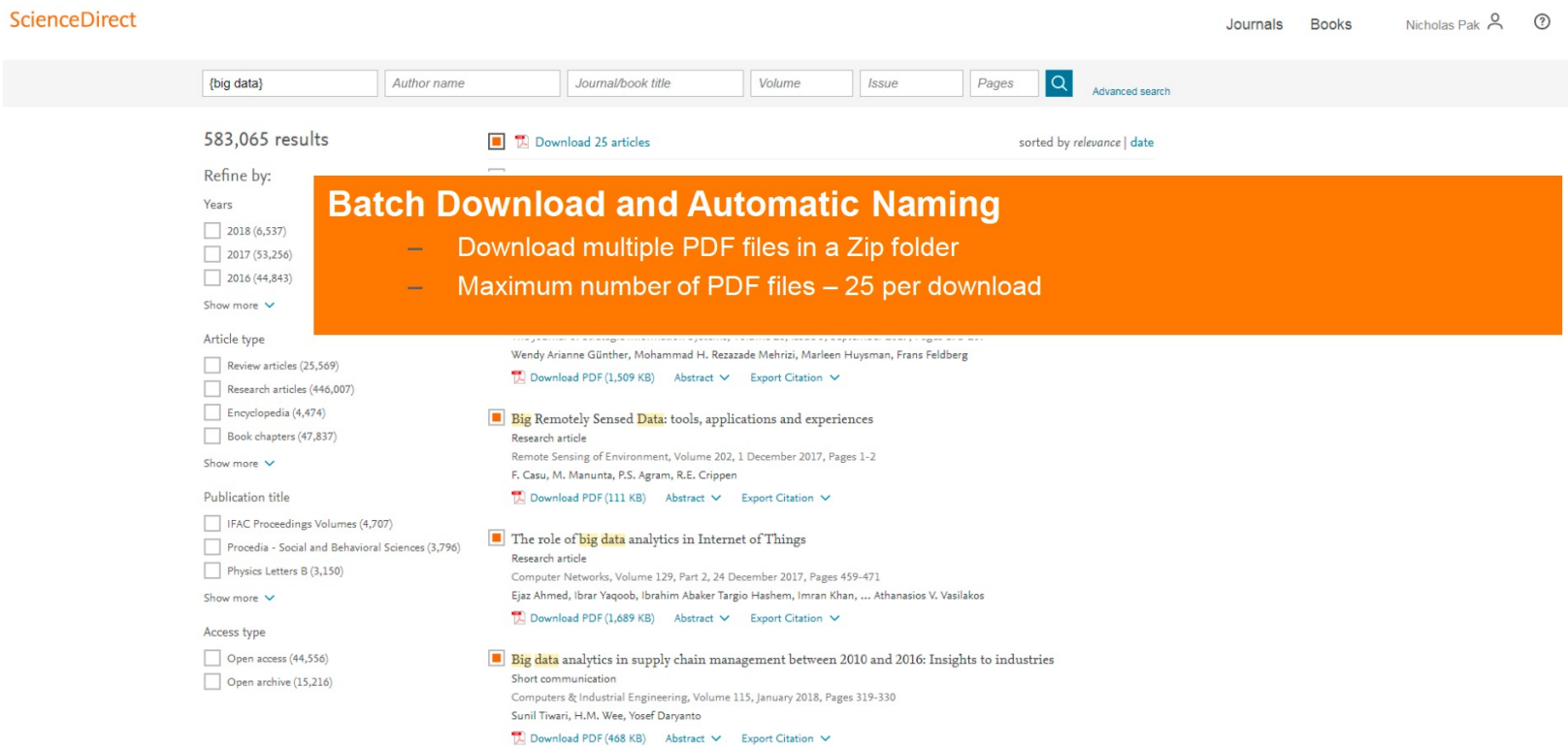
**Figure/Media Viewer**
Evaluate and read article

**Article Recommendations**
Stay up-to-date

**Citing Articles**
Evaluate article, stay up-to-date

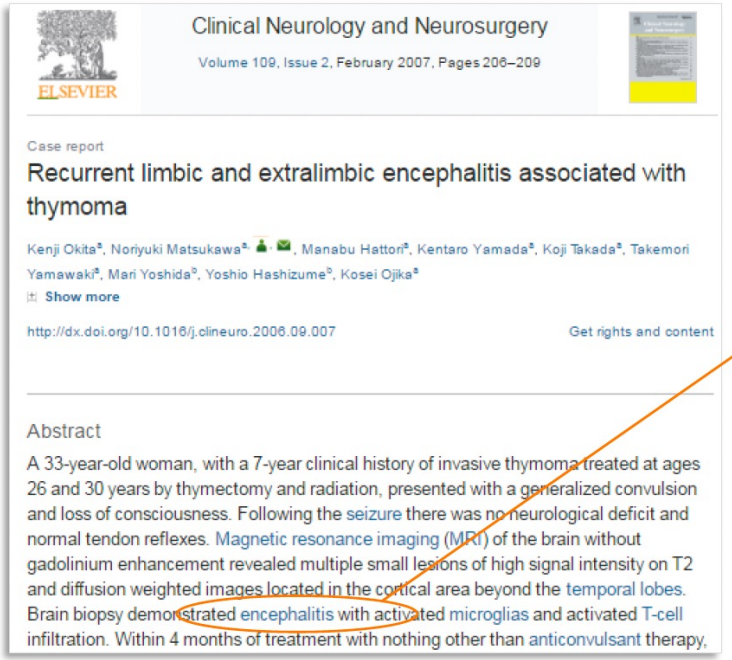
# ScienceDirect eBooks features: Download Multiple PDFs

## Download Multiple PDFs



# ScienceDirect eBooks features: ScienceDirect Topics

## ScienceDirect Topics helps researchers uncover critical and contextual information within their workflow



Clinical Neurology and Neurosurgery

Volume 109, Issue 2, February 2007, Pages 206–209

Case report

Recurrent limbic and extralimbic encephalitis associated with thymoma

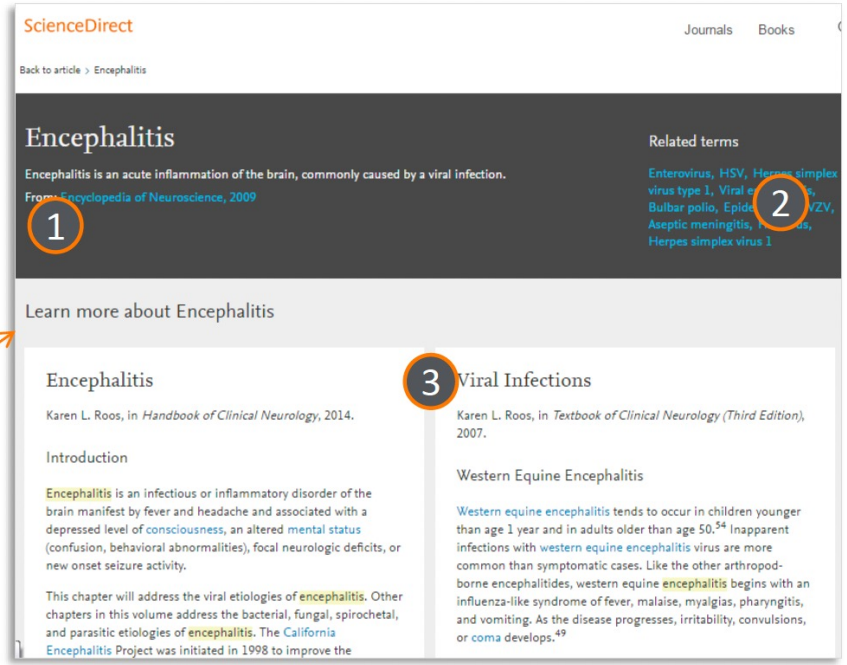
Kenji Okita[a], Noriyuki Matsukawa[a], Manabu Hattori[a], Kentaro Yamada[a], Koji Takada[a], Takemori Yamawaki[a], Mari Yoshida[b], Yoshio Hashizume[b], Kosei Ojika[a]

Show more

http://dx.doi.org/10.1016/j.clineuro.2006.09.007 Get rights and content

Abstract

A 33-year-old woman, with a 7-year clinical history of invasive thymoma treated at ages 26 and 30 years by thymectomy and radiation, presented with a generalized convulsion and loss of consciousness. Following the seizure there was no neurological deficit and normal tendon reflexes. Magnetic resonance imaging (MRI) of the brain without gadolinium enhancement revealed multiple small lesions of high signal intensity on T2 and diffusion weighted images located in the cortical area beyond the temporal lobes. Brain biopsy demonstrated encephalitis with activated microglias and activated T-cell infiltration. Within 4 months of treatment with nothing other than anticonvulsant therapy,



ScienceDirect Journals Books

Back to article › Encephalitis

Encephalitis

Encephalitis is an acute inflammation of the brain, commonly caused by a viral infection.

From Encyclopedia of Neuroscience, 2009

1

Related terms

Enterovirus, HSV, Herpes simplex virus type 1, Viral e…, Bulbar polio, Epid…, VZV, Aseptic meningitis, …, Herpes simplex virus 1

2

Learn more about Encephalitis

Encephalitis

Karen L. Roos, in *Handbook of Clinical Neurology*, 2014.

Introduction

Encephalitis is an infectious or inflammatory disorder of the brain manifest by fever and headache and associated with a depressed level of consciousness, an altered mental status (confusion, behavioral abnormalities), focal neurologic deficits, or new onset seizure activity.

This chapter will address the viral etiologies of encephalitis. Other chapters in this volume address the bacterial, fungal, spirochetal, and parasitic etiologies of encephalitis. The California Encephalitis Project was initiated in 1998 to improve the

3 Viral Infections

Karen L. Roos, in *Textbook of Clinical Neurology (Third Edition)*, 2007.

Western Equine Encephalitis

Western equine encephalitis tends to occur in children younger than age 1 year and in adults older than age 50.[54] Inapparent infections with western equine encephalitis virus are more common than symptomatic cases. Like the other arthropod-borne encephalitides, western equine encephalitis begins with an influenza-like syndrome of fever, malaise, myalgias, pharyngitis, and vomiting. As the disease progresses, irritability, convulsions, or coma develops.[49]

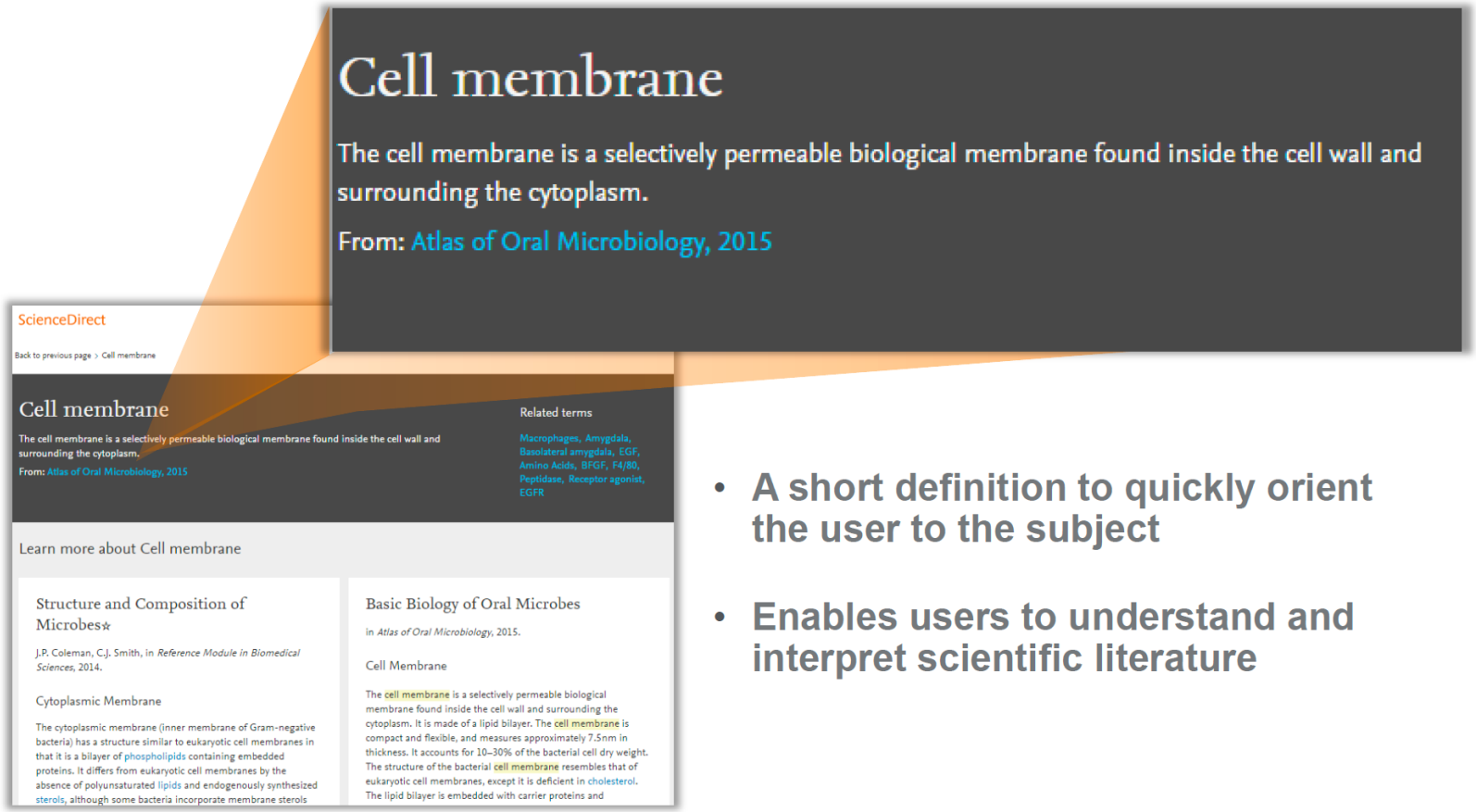
**Key Features:**

1. **Overall clear definition**
2. **Related terms (to topic pages)**
3. **Learn more on topic**
   - 10 longer definitions
   - Related/ relevant reading

Live in Neuroscience, Biomedical Sciences and Life Sciences **June 2017**

# ScienceDirect eBooks features: ScienceDirect Topics

## 1. Quick Definition

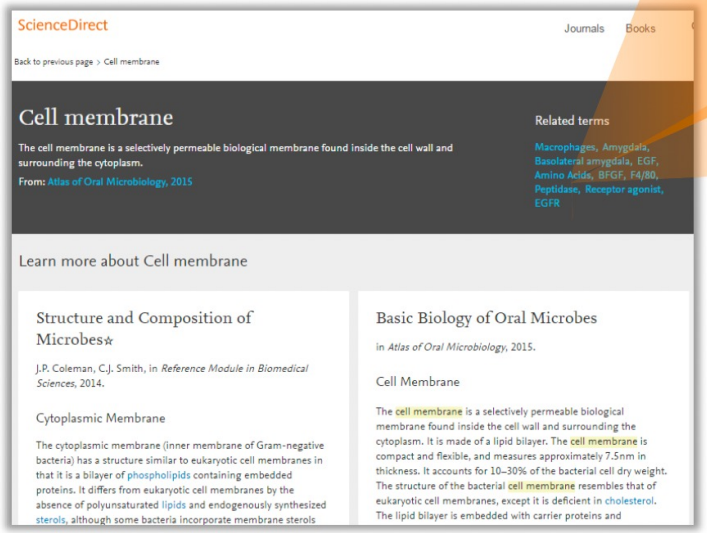


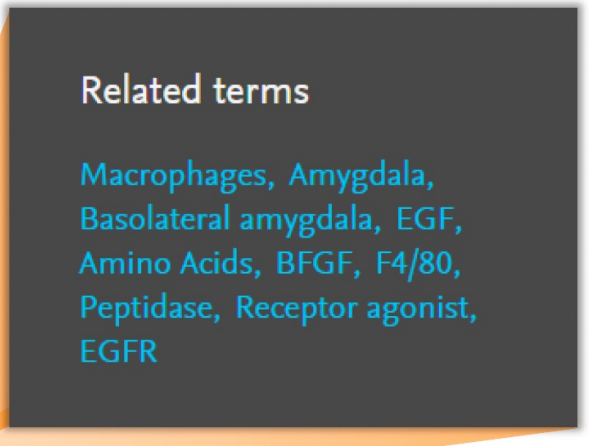

- A short definition to quickly orient the user to the subject
- Enables users to understand and interpret scientific literature

# ScienceDirect eBooks features: ScienceDirect Topics

## 2. Related Terms

- Users can learn more through interdisciplinary links



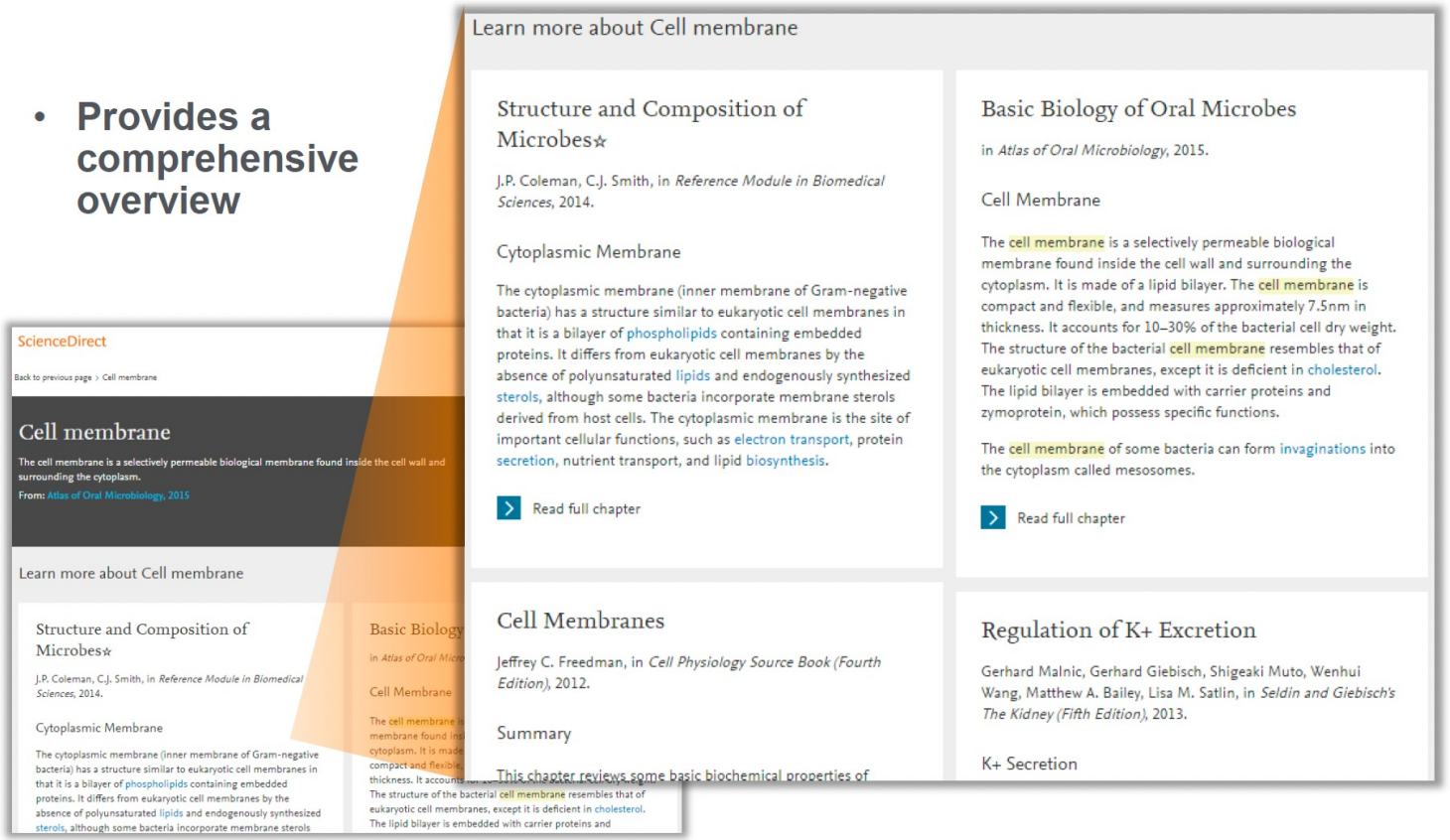




- Ideal for those who want to explore further

# ScienceDirect eBooks features: ScienceDirect Topics

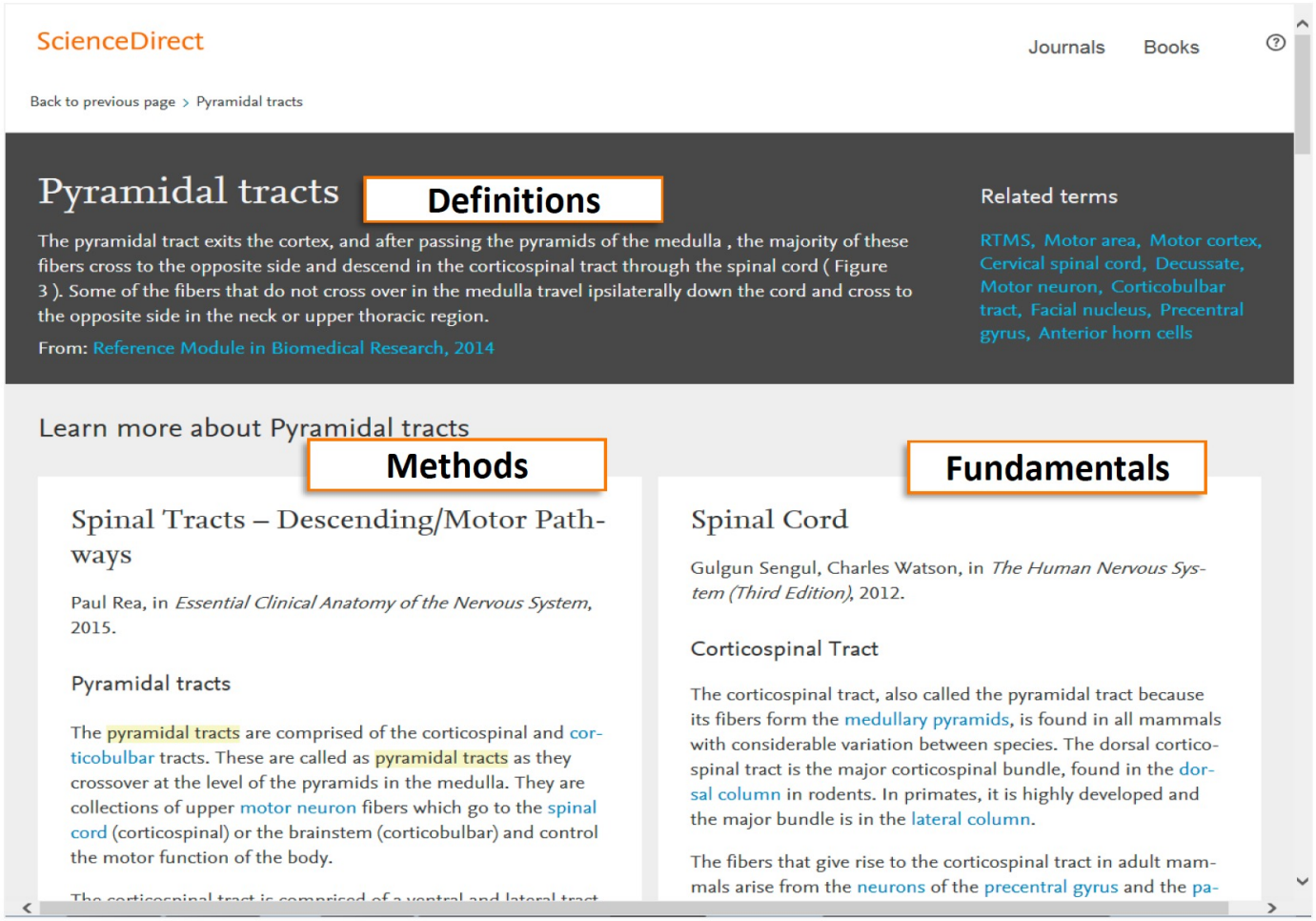
## 3. Relevant Excerpts

- **Provides a comprehensive overview**



# ScienceDirect eBooks features: ScienceDirect Topics

## Where Next?



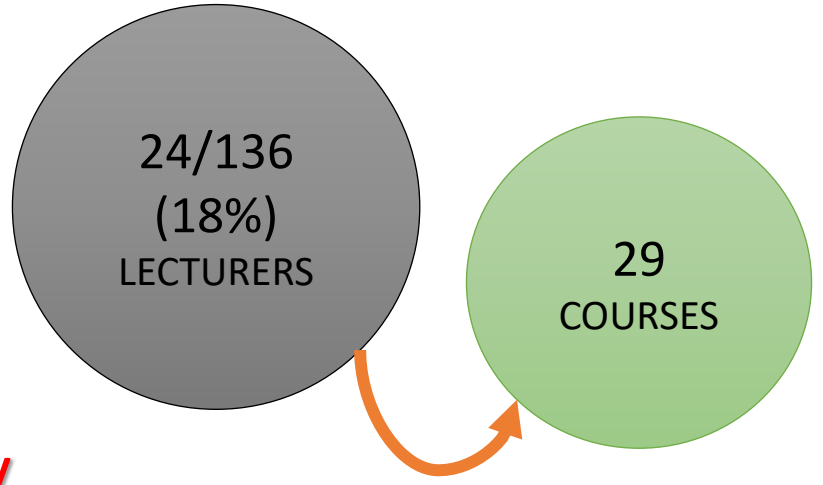
# Challenges

1 Age barrier:
Only young lecturer interested

2 New norm:
Lecturer preferred their ready material

3 Lack of creativity in T&L:
Need creativity in designing learning activity

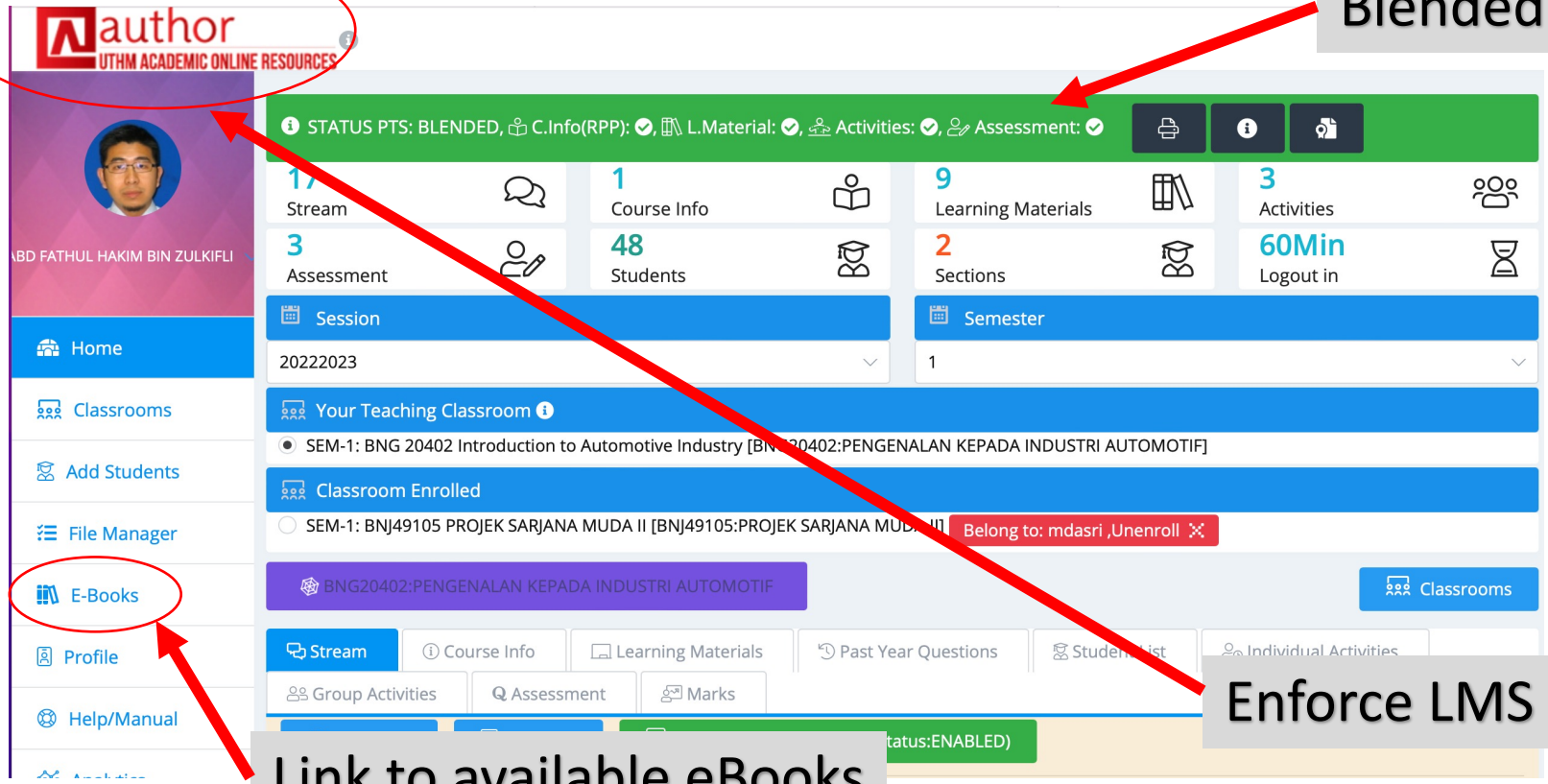
## eBook usage survey



# Overcome Strategies

## Enforce Blended Learning:

## Our faculty KPI: 70%




Blended learning status recorded

Enforce LMS usage in T&L

Link to available eBooks

# Overcome Strategies

## Lesson plan:

## Compulsory includes eBook references

### Lesson Plan

| | | |
|---|---|---|
| 12 | **References (include required and further readings, and should be the most current (less than 5 years))** | 1. Sakthivel, R. et al (2019). Introduction to Automotive Engineering. John Wiley & Sons. https://app.knovel-com.ezproxy.uthm.edu.my/kn/resources/kpIAE00013/toc?b-content-type=book&b-q=automotive&include_synonyms=no&q=automotive&sort_on=default<br>2. Xu Wang (2020). Automotive Tire Noise and Vibrations: Analysis, Measurement, and Simulation. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128184097/automotive-tire-noise-and-vibrations<br>3. William B. Ribbens (2017). Understanding Automotive Electronics : An Engineering Perspective. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128104347/understanding-automotive-electronics<br>4. Paul Nieuwenhuis and Peter Wells (2003). The Automotive Industry and the Environment. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9781855737136/the-automotive-industry-and-the-environment<br>5. Huaihe Song et al (2022). Nanotechnology in the Automotive Industry: A volume in Micro and Nano Technologies. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780323905244/nanotechnology-in-the-automotive-industry<br>6. Hua Zhao (2007). HCCI and CAI Engines for the Automotive Industry. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9781845691288/hcci-and-cai-engines-for-the-automotive-industry<br>7. Joseph P. Greene (2021). Automotive Plastics and Composites: Materials and Processing; A volume in Plastics Design Library. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128180082/automotive-plastics-and-composites<br>8. Radhakanta Rana and Shiv Brat Singh (2017). Automotive Steels: Design, Metallurgy, Processing and Applications. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780081006382/automotive-steels<br>9. B. Ashok (2022). NOx Emission Control Technologies in Stationary and Automotive Internal Combustion Engines: Approaches Toward NOx Free Automobiles. Elsevier. https://www-sciencedirect-com.ezproxy.uthm.edu.my/book/9780128239551/nox-emission-control- |

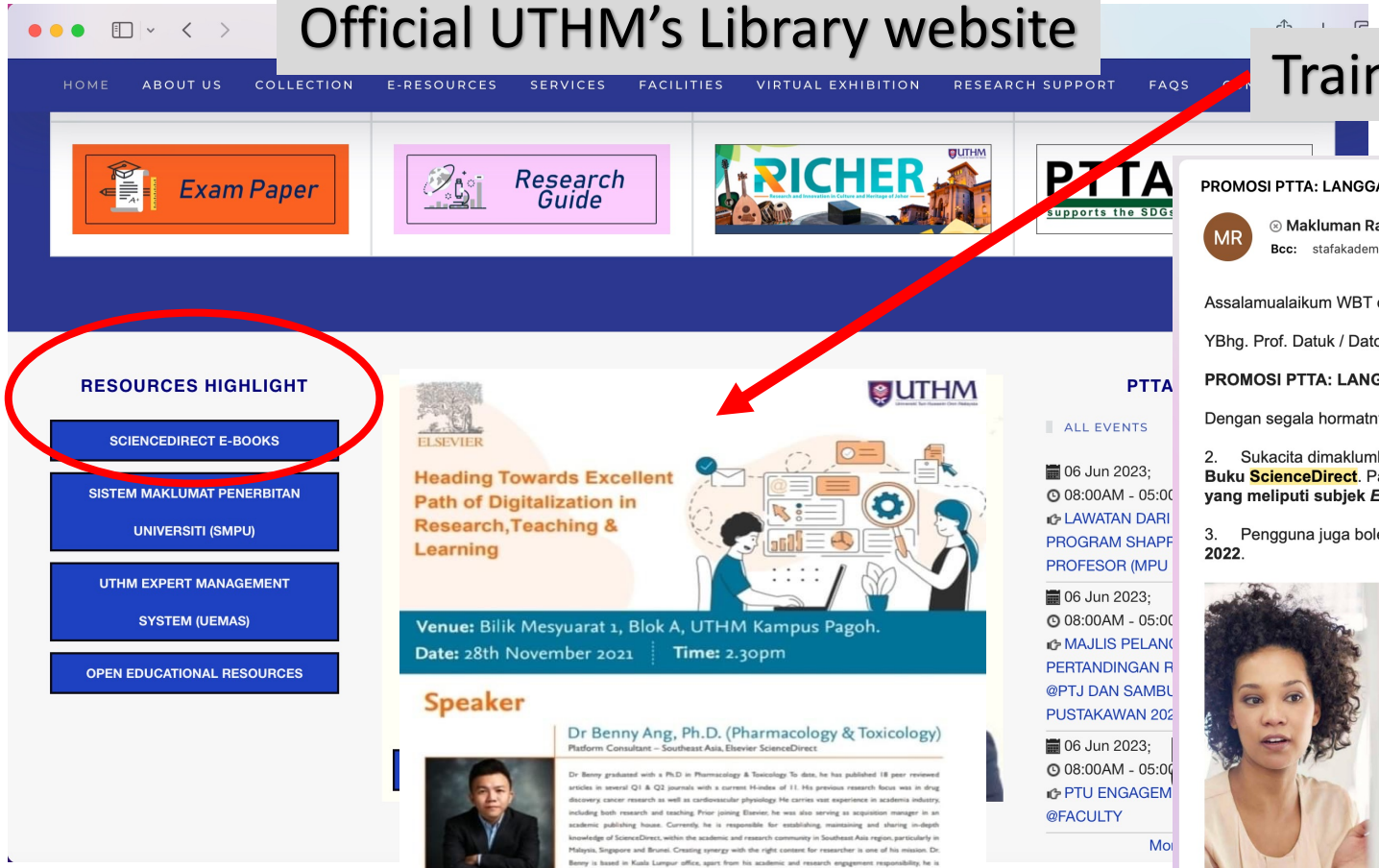
Update references using eBooks

# Overcome Strategies

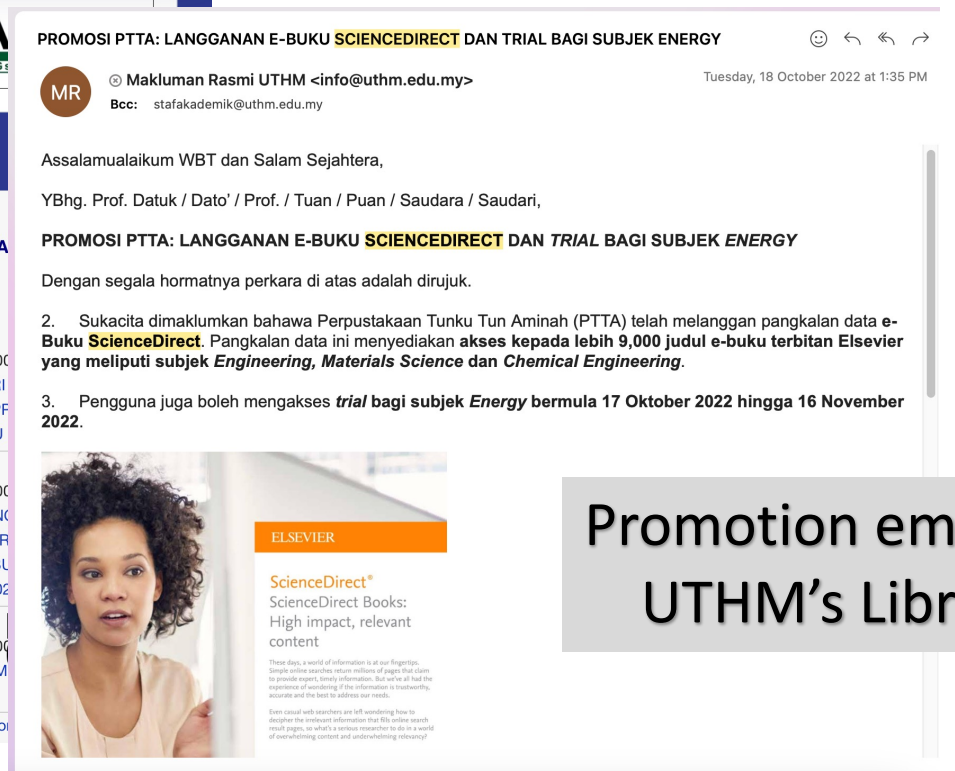
## Promotion:

Highlights and promotes to staff & students

### Official UTHM's Library website




### Training & Seminar




### Promotion email by UTHM's Library


Integrating digital educational technology into classroom technological ecosystem optimizes learning and improve access to knowledge repositories

- High quality eBooks were a key enabler. It provided students with access to extensive foundation knowledge and latest scholarly insights which enrich the university's research and academic culture


Q&A

UTHM
Universiti Tun Hussein Onn Malaysia

# Terima Kasih
# *Thank You*

Digital Business Card