

# Careers at the RSC

*Joanne Thomson*  
*15<sup>th</sup> May 2012*



# About me

Joanne Thomson  
Deputy Editor, *Chemical Science*,  
*ChemComm* and  
*Chem Soc Rev*

Work with Editor and Editorial  
Board to ensure journals  
contain best new science

Ensure journals have rigorous,  
fair, efficient procedures

Meet scientists to keep aware of  
field and attract top research





# RSC: A Learned Society





# What is RSC Publishing?

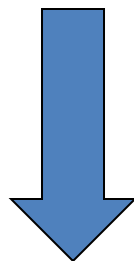


RSC Publishing



# RSC Publishing Growth

- 2006: RSC published ~38,000 journal pages = ca. 5000 journal articles

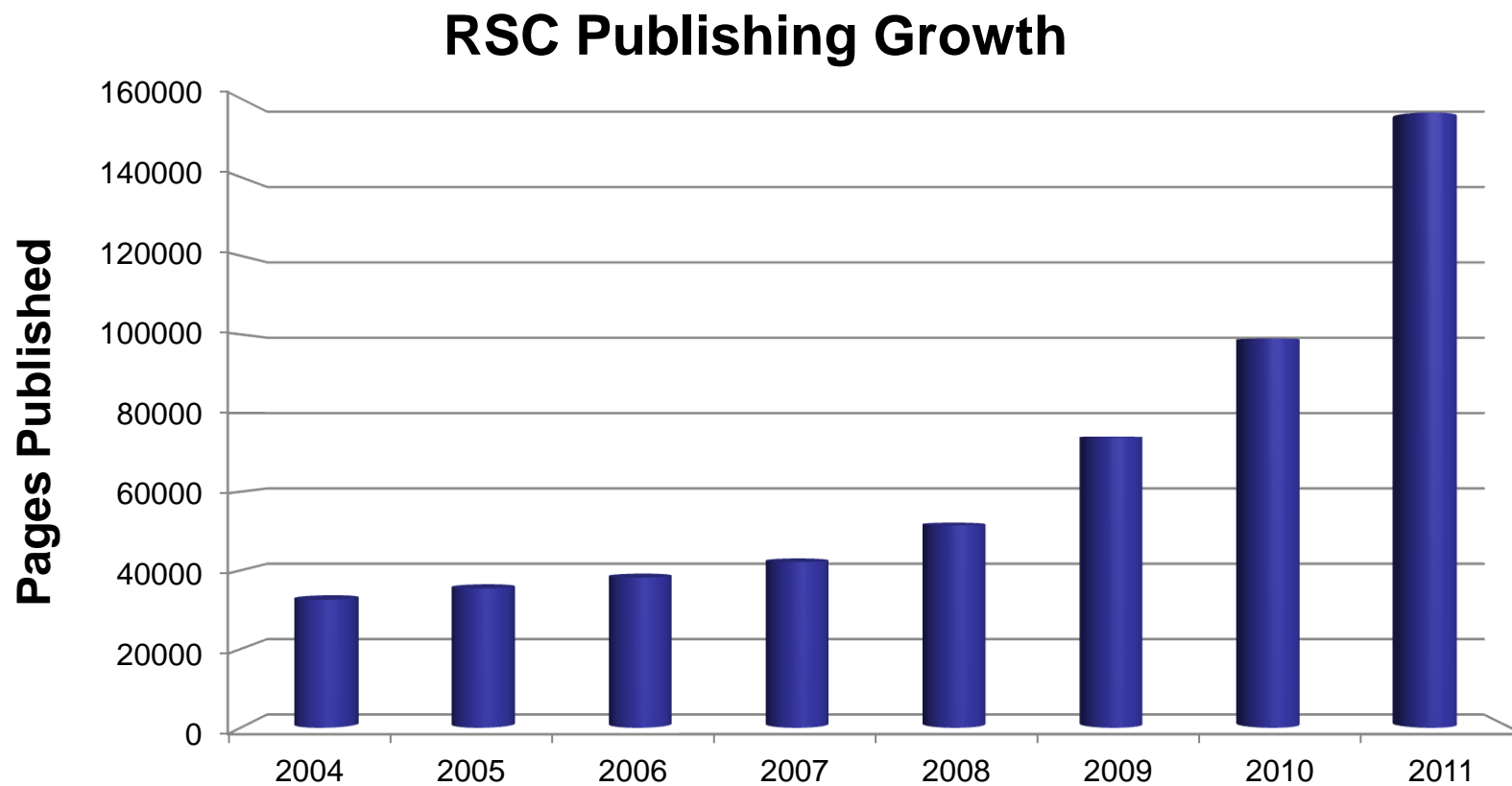


- 2011: RSC published >156,000 journal pages = >20,000 journal articles

**4x !**

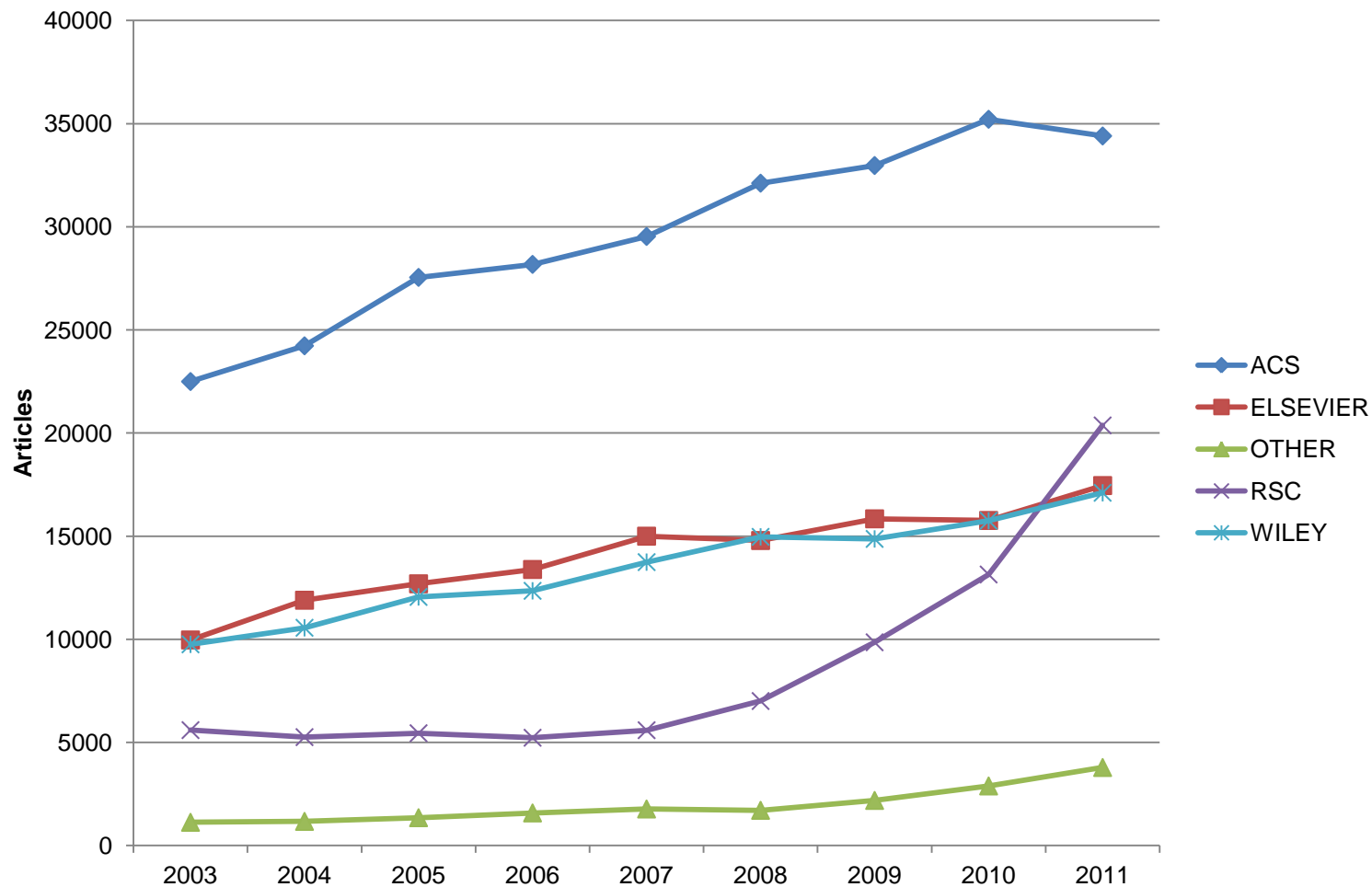


# RSC Publishing Growth





# Growth in Chemistry Papers





# The trigger

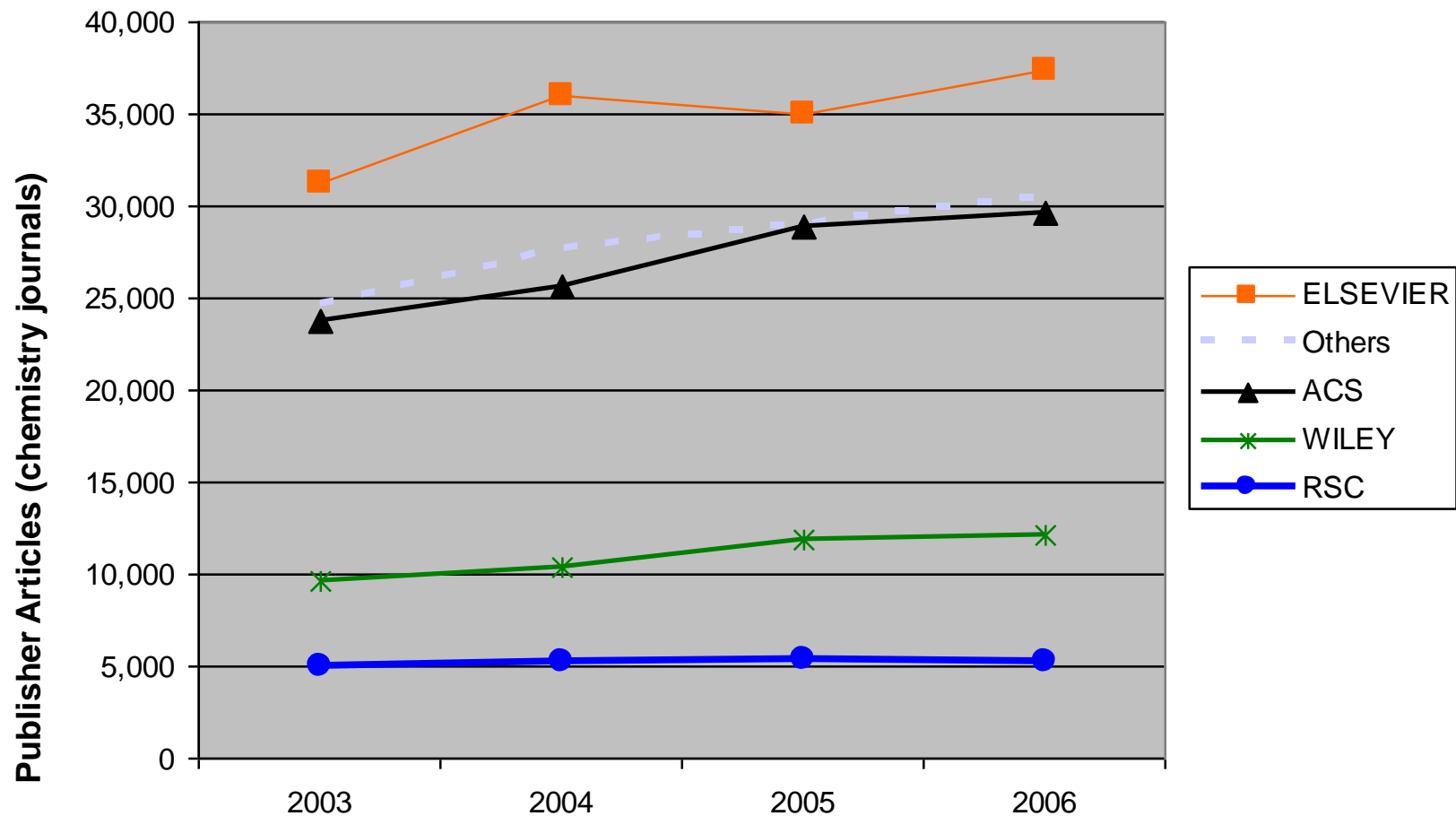
## Evaluation – 2007

- Great high impact journals
- Good selection of books and other products
- Perceived as UK centric
- Quality high, but market share small (and declining)





# Declining market





# Strategic Actions

- Growth
  - Market share and also Impact
  - Selective / strategic new journal launches
- International reach and profile
- Author (customer) focus
- Innovation
- Similar plans for books, magazines, etc.

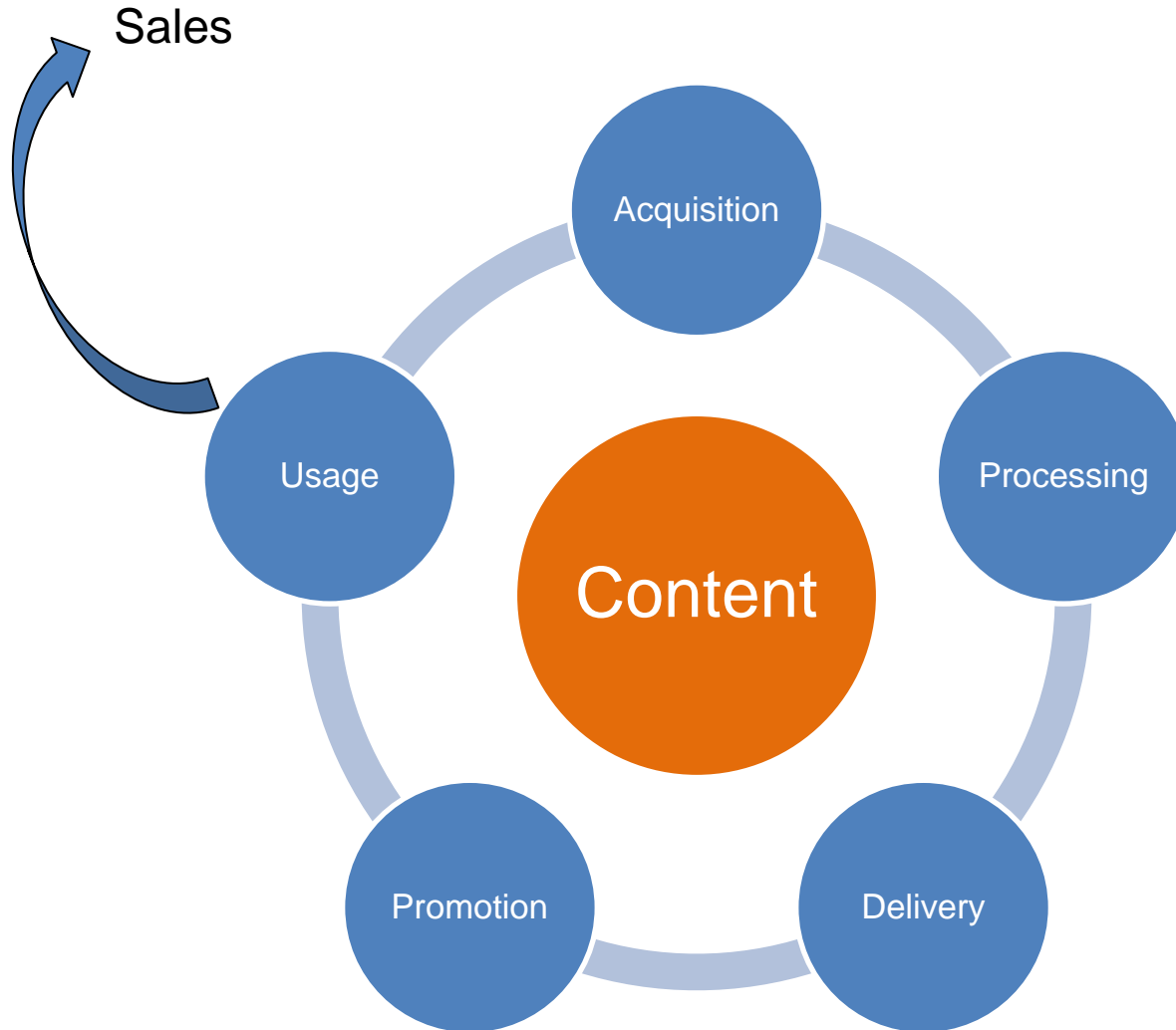


# RSC's vision (2010-2014)

‘To be the foremost in the world at promoting and developing the chemical sciences for the benefit of society’



# Growth – the Challenges





# Content Acquisition

- **Existing authors**

- Relationships, networking
- Citation / usage analysis

- **Competitors' authors**

- Market intelligence
- Themed issues

- **New journals**

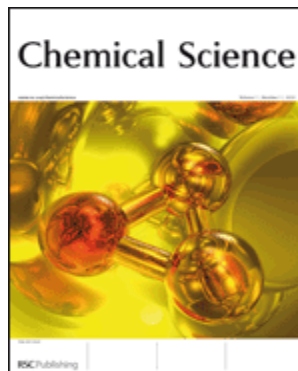
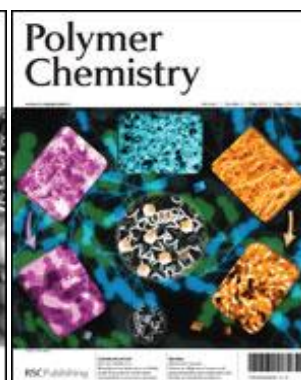
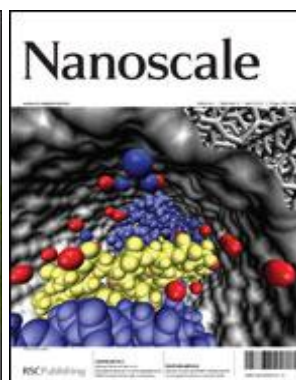
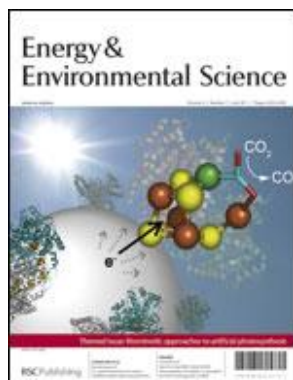
- Journal development work very closely with Business Development



Journal  
Development



# New journals



RSC Publishing



# Business Development



**Andrew Nightingale**

Business Development Manager  
Business Development and Business  
Intelligence teams

- New journal development – market research, business case and launch management
- Partnership arrangements for new journals
- Key Centre Programme for new journals providing sales leads
- Market reporting and analysis – customers, competitors, and markets
- Business Intelligence Unit – established Nov 2011



# RSC Advances



- *Innovative, Online and Inclusive, **RSC Advances*** is an international journal covering all of the chemical sciences, including interdisciplinary fields. The criteria for publication will be that the experimental work must be high quality, well-conducted and adds to the development of the field.



# RSC Advances



**Kathleen Too**  
Deputy Editor, RSC Advances

- **Attracting new authors** – some authors are currently not able to publish in RSC journals so *RSC Advances* will give them the opportunity to publish with a respected society publisher.
- **Publishing papers in new subject areas** – there are subject areas of speciality and interdisciplinary research across the chemical sciences that are not covered by the existing RSC portfolio of journals.
- **Entering new markets** – Launching *RSC Advances* will enable RSC Publishing to enter into new markets for additional content, supporting the aims of the RSC international strategy.



# Processing

- **New systems**

- ScholarOne
- Web-based
- Wide popularity

- **Automation**

- File transfer
- Archiving

- **Outsourcing**

- Associate Editors
- Production services

- **New suppliers**

- Speed, reliability, quality



**Joanna Pugh**

Systems Specialist  
Editorial Production Team

- Support, maintain and enhance our workflow system
- Looking for efficiencies
- Identifying requirements
- Using technology



# Delivery

- Online publishing has revolutionised this!
- Content 24/7 with mobile devices
- There are lots of possibilities.....
- .....generally chemists want the pdf of the article (85% of our downloads are for the pdf version)



**Jack Rumble**

e-Publishing Specialist

Innovation and Product Development team

**Our content has to be searchable, discoverable and  
accessible to people on the move**



# Increasing Discoverability

RSC | ChemSpider | **Feedback** | Login | Register

RSCPublishing

Advanced Search

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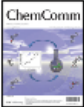
## Welcome to RSC Publishing

This platform provides access to journals, books and databases from RSC Publishing, linking over 1,056,217 chemical science articles and chapters. You can access the latest research of interest using the custom eAlerts, RSS feeds and blogs or you can explore content using the quick and advanced searches. Discover the highest quality integrated scientific research today - search faster, navigate smarter and connect more.

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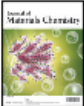
## Most Read

Journals Books



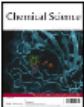
### Chemical Communications

Urgent high quality communications from across the chemical sciences.



### Journal of Materials Chemistry

High impact applications, properties and synthesis of exciting new materials



### Chemical Science

A new journal for findings of exceptional significance from across the chemical sciences

[View all Journals](#)

## News from RSC Publishing

### Biomaterials Science open for submissions

RSC Publishing's new journal, Biomaterials Science, is now open for submissions. Bridging materials science, biology, chemistry and physics, the jo...

[Biomaterials Science Blog](#), 01 Mar 2012

### Pancakes - the ultimate example of reducing food wastage

Here in the UK it's traditional to make pancakes on Shrove Tuesday to use up any eggs, milk, and sugar to stop them from being wasted during lent. Tod...

[RSC Books Blog](#), 20 Feb 2012

### Could this be your library?

Have you seen the front cover of the RSC Publishing Catalogue? This could be your library! In 2011, we asked the librarian community to enter their li...


[RSC Publishing Blog](#), 20 Feb 2012

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RSC Publishing is pleased to announce new agreements for our content to be indexed in Serials Solution Summon™, EBSCO Discovery Service™, ProQuest Ill...

[RSC Publishing Innovation](#), 08 Feb 2012


## Web Demo

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2 - 4 July 2012  
Hof Van Wageningen,  
Netherlands



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app for free

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# Mobile/Tablet





# RSC Semantic Publishing



- Formally known as ‘Project Prospect’
- Machine-readable content through semantic enrichment
- RSC editors annotated compounds, concepts and data and linked them to electronic resources (e.g. biological databases)
- Pioneering – 1<sup>st</sup> publisher to do this for chemistry
- Award winning – 2007 ALPSP/Charlesworth Award for Publishing Innovation



## The first total synthesis of moracin O and moracin P, and establishment of the absolute configuration of moracin O

Navneet Kaur<sup>†a</sup>, Yan Xia<sup>†a</sup>, Yinglan Jin<sup>a</sup>, Nguyen Tien Dat<sup>a</sup>, Kondaji Gajulapati<sup>a</sup>, Yongseok Choi<sup>a</sup>, Young-Soo Hong<sup>a</sup>, Jung Joon Lee<sup>a</sup> and Kyeong Lee<sup>\*a</sup>

<sup>a</sup>Molecular Cancer Research Center, Korea Research Institute of Bioscience, 387-1 Yuseong-dong, Yuseong-gu, Daejeon 305-806, Korea. E-mail: kaylee@kribb.ac.kr  
+82 42 860 4382

<sup>b</sup>School of Life sciences and Biotechnology, Korea University, Anam-dong, Seoul 151-747, Korea

Received (in College Park, MD, USA) 5th January 2009, Accepted 10th January 2009

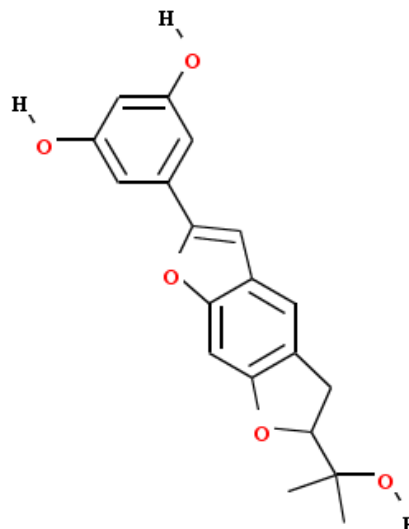
First published on the web 4th March 2009

The first total synthesis of the naturally occurring benzofurans, moracins O and P, was achieved via a **cross coupling reaction** followed by *in situ* cyclization, and the absolute configuration of moracin O was established.

*Mori Cortex Radicis*, the root bark of some *Morus* species, has been used in traditional Chinese medicine as a **diuretic**, an expectorant and a **laxative** agent.<sup>1</sup> Various prenylated **flavonoids**, **benzofurans** and **coumarins** compounds<sup>2</sup> with biological activities, including cytotoxicity,<sup>3</sup> COX-1 and 2 inhibition,<sup>4</sup> have been isolated from these species.

In search of small molecule **inhibitors** against hypoxia-inducible factor (HIF)-1, a key transcription factor in the adaptation process of cancer cells to tumor hypoxia, a **bioassay**-guided fractional crystallization (FC) and HRE reporter **assay** on **natural products** has been conducted. Some moracin compounds exhibited inhibitory effects in cell-based HRE assays in human hepatocarcinoma Hep3B cells. Compound 1 exhibited the strongest inhibitory activity ( $IC_{50} = 0.14$  nM), while (–)-moracin P

### Moracin O



#### Synonyms

- moracin O
- Moracin O
- Show more >>

#### Chemical Information

- SMILES:  
[H]OC1=CC(O[H])=CC(=C1)C=3OC4=CC=2OC(C)=C4
- Show more >>

#### Articles referencing this compound

The first total synthesis of moracin O and moracin P, and establishment of the absolute configuration of moracin O

Navneet Kaur, Yan Xia, Yinglan Jin, Nguyen Tien Dat, Kondaji Gajulapati, Yongseok Choi, Young-Soo Hong, Jung Joon Lee and Kyeong Lee, *Chem. Commun.*, 2009, 1879  
DOI: 10.1039/b823340c

#### Downloadable Files

##### Chemical Markup Language Representation

Download CML file for this compound

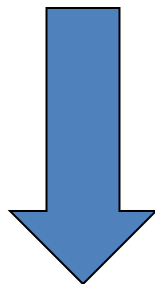
CML



# RSC Semantic Publishing



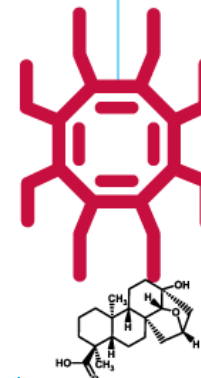
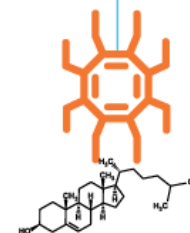
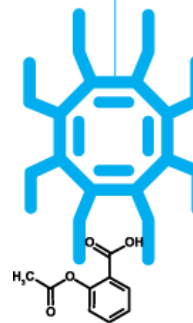
BUT IT WAS LABOUR-INTENSIVE & TIME-CONSUMING!



- Now integrated and automated within our routine publication processes
- Integrated with ChemSpider



# RSC & ChemSpider – May 2009



[www.chemspider.com](http://www.chemspider.com)



## **ChemSpider is a free website for chemists:**

- Over 26 million compounds, >400 data sources
- Integrates chemical structure data
- Creates a “structure-based hub” to information and data
- Provides access to structure-based “prediction algorithms”
- Chemists can contribute their own data
- The community can curate/correct data
- Multi Award winning
- Fully supported and made available by RSC





The organocatalytic three-step total synthesis of (+)-frondosin B - Chemical Science (RSC Publi - Windows Internet Explorer pro

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DOI:10.1039/C2SC21000A

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The organocatalytic three-step total synthesis of (+)-frondosin B - Chemical Science (RSC Publishing)

Maud Reineker, Merck Center for Catalysis

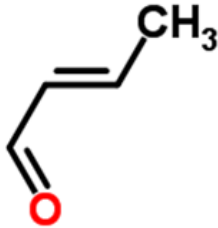
Received 12th November 2011

First published online 14th December 2011

The frondosin B synthesis is the first total synthesis of a member of the frondosin family, and the first synthesis of a member of the frondosin family as the center of chirality.

Introduction

First isolated from the marine sponge *Frondosia*, frondosin B promotes the treatment of several marine diseases.



2D 3D Save Zoom

- Double-bond stereo

### Names and Identifiers

Names and Synonyms Database ID(s)

Validated by Experts, Validated by Users, Non-Validated, Removed by Users, Redirected by Users

Experts

Google http...

85922; Tel: +1 609 2582254

inflammatory properties to potential application in anticancer and HIV therapy. Herein, a concise enantioselective total synthesis of crotonaldehyde to crotonaldehyde in the presence of an imidazolidinone organocatalyst builds the critical stereogenic center. The combination of X-ray crystallographic data, deuterium labeling, and chemical correlation studies provides further evidence for the structure of crotonaldehyde.

It has been found to be a micromolar inhibitor of interleukin-8 (IL-8) receptors and protein kinase C (PKC).<sup>2</sup> Given that IL-8 is involved in the pathogenesis of Crohn's disease, ulcerative colitis, rheumatoid arthritis, receptor antagonists such as the frondosins have been proposed as therapeutic leads for human cancers, the frondosin isolates are also considered to be promising leads for oncology studies.<sup>5-7</sup> Remarkably, the frondosin isolates are also considered to be promising leads for oncology studies.

and cancer therapies

Trusted sites | Protected Mode: Off

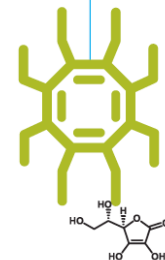
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# Why RSC acquired ChemSpider

- Commitment to serve the community
- Bring cheminformatics expertise in-house
- Add additional data to publications



## And as a result:

- Credibility with researchers at the cutting edge of chemical information
- Participation in UK/US and EU research projects
- Opportunities and influence



# Increasing searchability



- Interdisciplinary, lots of new authors
  - Lots of new papers!
- Need a sensible way of navigating the extra content

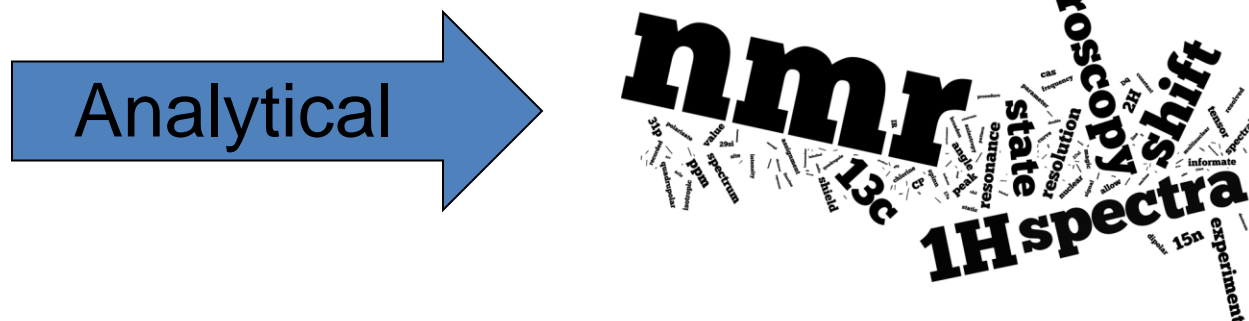


**Colin Batchelor**  
Senior Informatics Analyst  
Cheminformatics team



# Aim: classify by topic

- 12 broad topics that are intuitive to users
- Used statistical model\* to analyse >20000 titles and abstracts
- Extracted 128 topics
- Wordle images classified by editorial staff
  - 8 topics rejected for being too general or nonsense
  - Remaining 120 classified under 12 broad topics





# The result

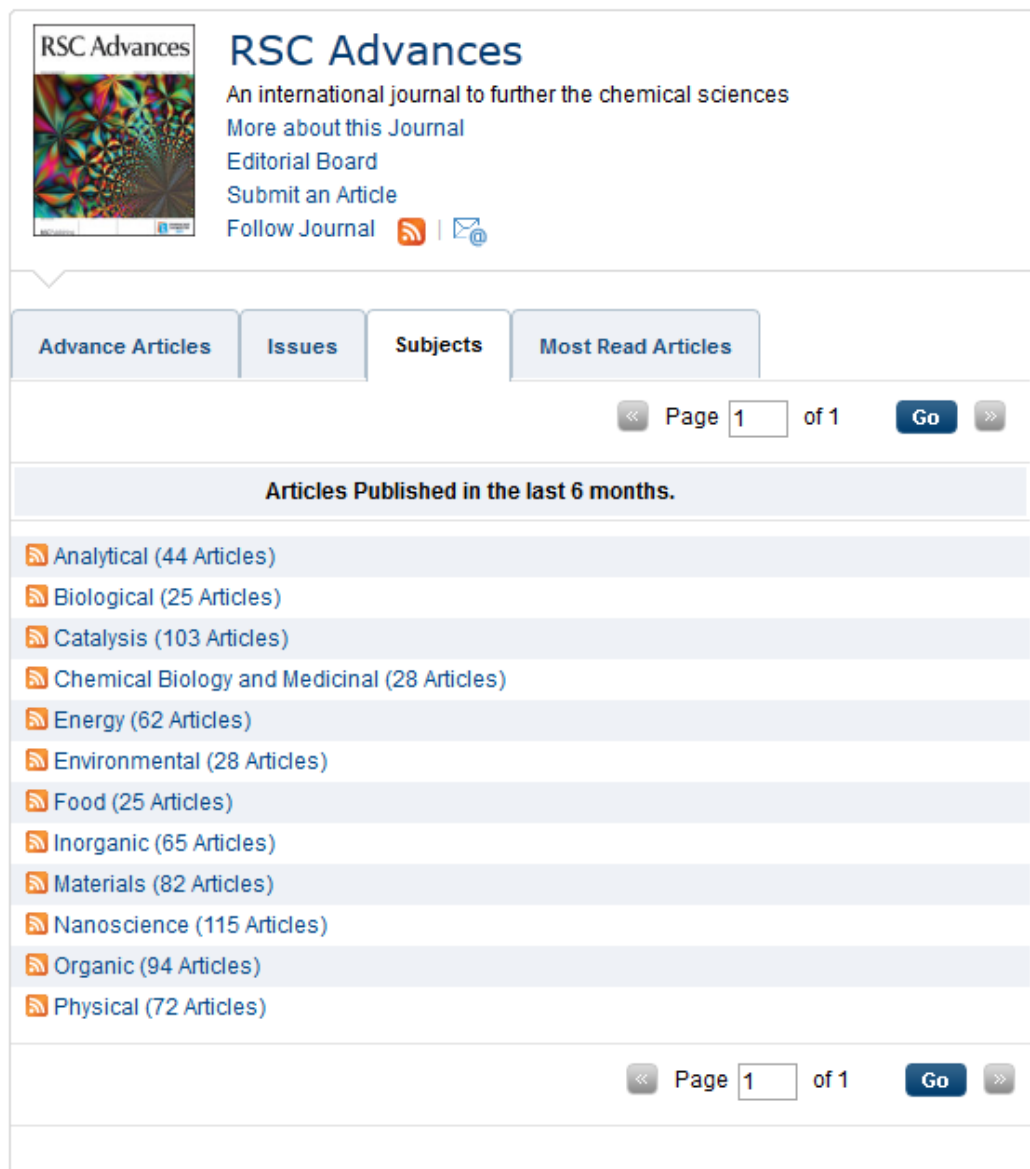
From our authors:



“Very useful!”

“Superb!”

“... will make it easier for readers to identify papers which might be interesting to them.”

RSCPublishing















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**Articles Published in the last 6 months.**

-  [Analytical \(44 Articles\)](#)
-  [Biological \(25 Articles\)](#)
-  [Catalysis \(103 Articles\)](#)
-  [Chemical Biology and Medicinal \(28 Articles\)](#)
-  [Energy \(62 Articles\)](#)
-  [Environmental \(28 Articles\)](#)
-  [Food \(25 Articles\)](#)
-  [Inorganic \(65 Articles\)](#)
-  [Materials \(82 Articles\)](#)
-  [Nanoscience \(115 Articles\)](#)
-  [Organic \(94 Articles\)](#)
-  [Physical \(72 Articles\)](#)

« Page 1 of 1 [Go](#) »



# Growth – a summary

- **Acquisition**

- In-depth analysis by both Journals and Business Development
- Existing and new customers
- New journals

- **Processing**

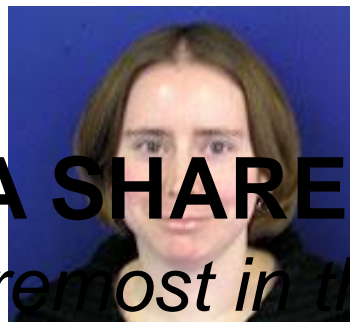
- Streamlining, improving, innovating, automating, outsourcing

- **Delivery**

- RSC Publishing Platform
- RSC Mobile
- Semantic Publishing
- ChemSpider
- RSC Advancing topic slicing



# What about our people makes us succeed?



## A SHARED VISION

*To be the foremost in the world at promoting and developing the chemical sciences for the benefit of society*





# What next?

- We have a lot of information in a lot of formats in a lot of places
- We need to utilise and unlock its potential

## “BIG DATA”



**Will Russell**  
Manager,  
Innovation &  
Product  
Development





# Any questions?

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[chemspider@rsc.org](mailto:chemspider@rsc.org)

@ChemSpider