Bill Clegg Newcastle University

Joint Section Editor of

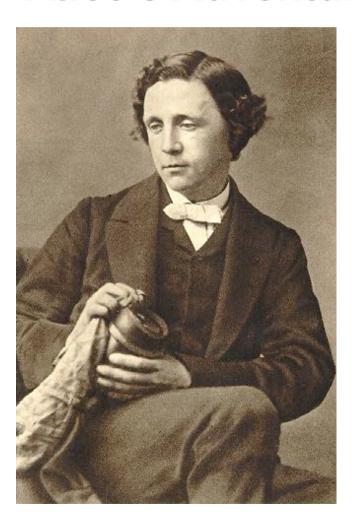
Acta Crystallographica Section E

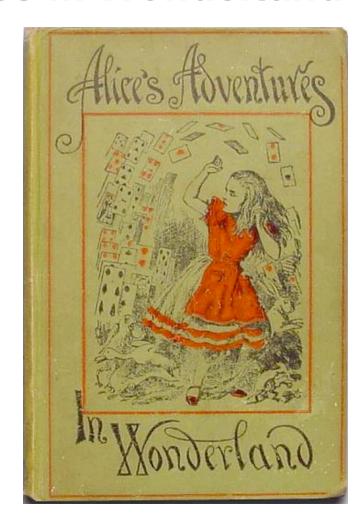
(Structure Reports Online)

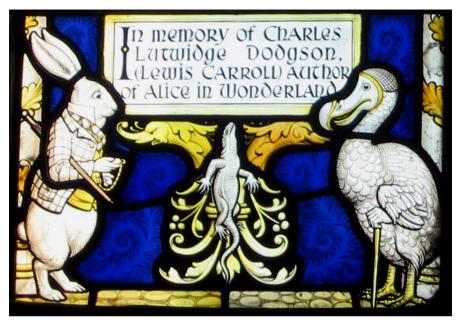
2000-2008

Acta E's Adventures in Journal-land

# ...with apologies to Lewis Carroll Alice's Adventures in Wonderland











## Acta E – a brief history

2000 Concept and initial planning

2001 First year of publication (Volume E57)

800 papers (6 Co-editors)

2002 923 papers

2003 1299 papers

2004 1808 papers (30 Co-editors)

2005 2887 papers

2006 3991 papers

2007 5181 papers (58 Co-editors)

# Acta E Objectives

Publication of crystal structures:

easy

reliable

reputable

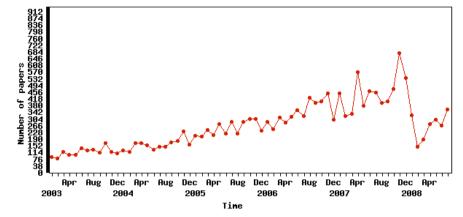
popular with authors

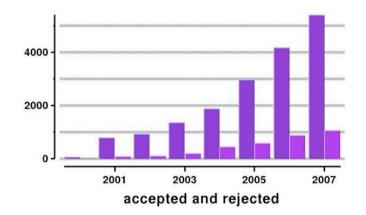
widely read

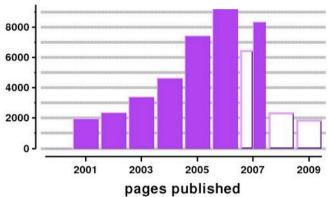
rapid

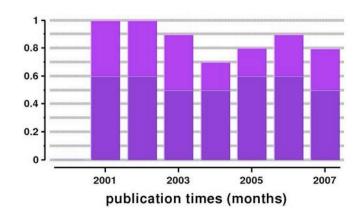
More than just a "database entry with ISI citation"

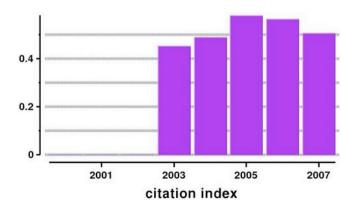
#### **Acta E** Some trends











## 1. An entirely electronic journal

- submission (in CIF format, via web site)
- review (via PDF generation + original files)
- editing (directly in CIF or with IUCr tools)
- proofs (via email and web site)
- publication (including email alerts)
- reprints (PDF, including Supplementary Material)
- all correspondence (email, also via web site)

2. Appropriateness of crystal structure reporting for a purely electronic publication medium

The central importance of CIF

## 3. Submission, handling and review procedures

Initially (2001): mainly email + FTP; several steps involved in submission of files and copyright agreement; email correspondence among authors, IUCr staff, co-editors

2006: fully web-based system, including tailored pages for authors, co-editors, section editors, IUCr staff; storage of web-generated emails

2007–2008: enhancements for Open Access mechanism

4. Tools for authors, editors and readers

CheckCIF/PLATON [also enCIFer] for checking etc.

PrintCIF for manuscript preview

publCIF for CIF editing and manuscript preparation

Jmol toolbox for generating enhanced figures

## 5. Changes in content and format of papers

Original style (2001) essentially as Acta C but shorter

2005: removal of some tabulated experimental items

2006: restriction of Comment section to 400 words

2007: new short format with enhanced

**Supplementary Material** 

#### 6. Open Access

Introduced primarily for financial reasons

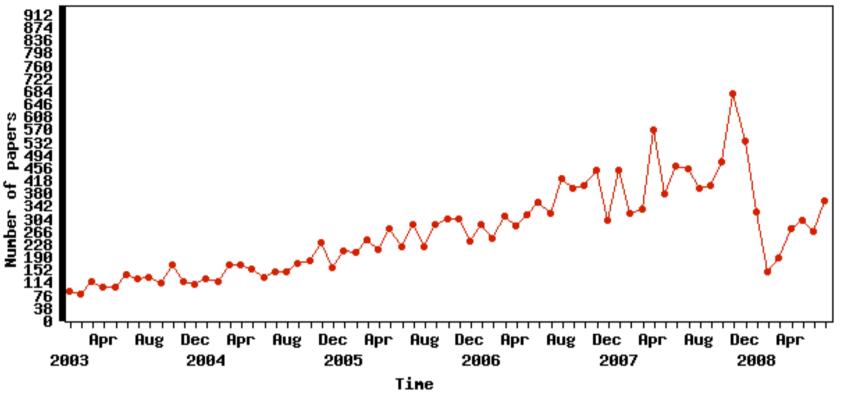
Acta E once again a testing ground for new methods

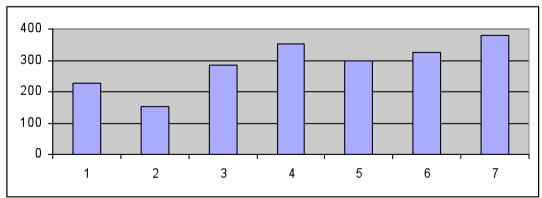
Aim to minimise cost to authors – hence new format

Predictions of dire consequences, including demise of Acta E and flood of papers for Acta C

Actual outcome is an initial reduction, followed by continued growth

Currently similar statistics to 2005–2006





## The impact of Acta E

- Testing ground for IUCr, followed later by Acta F
- Spectacular growth
- Demonstration of benefits of electronic-only publication (including speed)
- Largest annual contributor to CSD
- Financial difficulties caused by success, leading to introduction of Open Access model

#### The impact of Open Access

- Testing ground for IUCr once again
- Initial reduction in submitted papers (partly an artefact of the pre-OA bulge), followed by continued growth from a lower baseline
- General acceptance of Open Access charges, which are very moderate
- Change in balance of author nationalities
- Larger potential readership
- Eventual effect on journal impact factor?

## New and continuing challenges

Difficult structures

Difficult authors!

Poorly written text, untrained authors, factual errors

Consistency and flexibility

Degree of automation

Heavy dependence on human involvement

Chemical diagrams: automatic generation, checking

Still only a very small fraction of known structures

No publication of of primary data

#### Acta E's Adventures in Journal-land

