Abstracts for scientific papers

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What is an abstract?

  - an abbreviated, accurate representation of the contents of a document, without added interpretation or criticism and without distinction as to who wrote the abstract

- ANSI/NISO 239.14-1997 Guidelines for abstracts (reaffirmed in 2010)
  - brief, objective representation of the contents of a primary document or an oral presentation
Not an abstract

- **Annotation** – *anotace* - Brief explanation of a document or its contents, usually added as a note to clarify a title. It is often subjective and may include information that is not present in the publication being represented by the abstract.

- **Summary** – *souhrn* - A brief restatement of the text within a document (usually at the end), stating most important findings and conclusions. It is intended to complete the orientation of a reader who has studied the document.

- **Extract** - *výtah* - One or more portions selected to represent the whole.
Why write an abstract?

- Represent one’s work
- Often the first part of the text one reads (Nicholas, Huntington, and Jamali, 2007)
- Often the only part of text freely available on the Web
How to write and abstract? 1/2

  - Purpose
  - Method
  - Results
  - Conclusions
  - Collateral information
How to write and abstract? 2/2

- Journal editors have their own guidelines
    - Purpose
    - Design/methodology/approach
    - Findings
    - Research limitations/implications
    - Practical implications
    - Social implications
    - Originality/value
  - Knihovna
    - Společně s textem zašlete krátké resumé v českém i anglickém jazyce (cca 8 řádků)
Milas-Bracović (1987); Tibbo (1994)

- Authors do not always follow the recommended structure
- Our research
  - Eliška Vesela & Viktor Dobrovolny (BOBCATSSS, IKI & INFORUM conferences 2011)
Content analysis

- What is in the text?
  - ILS
  - Ethnography, anthropology
  - Sociology
  - History
  - Etc.
Sample

- Czech journals
  - Materials sci.
    - Hutnické listy (100 abstracts)
    - Ceramics-Silikáty (100 abstracts)
  - ILS
    - Ikaros (100 abstracts),
    - Knihovna Plus (31 abstracts),
    - Knihovnický zpravodaj Vysočina (43 abstracts)
    - ProInFlow (10 abstracts)

- Slovenian journals
  - Materials sci.
    - Materiali in tehnologije (25)
  - ILS
    - Knjižnica (100)

- International journals
  - Materials sci.
    - Material Science (25)
  - ILS
    - Journal of Documentation (100)
The accumulation of deformation affects the lifetime of a monocristal submitted to low cyclic mechanical and thermal loading.

An analytical method was developed considering the damages due to cyclic and axial plastic and creep deformation.

The method was checked with tests in vacuum on specimens of monocrystals with different space orientation, also specimens with stress concentrators.

The distribution of stresses was FEM modelled.

The fracture depends on the space orientation of the specimen and of the loading parameters.

A new experimental-computational method using deformation-fracture criteria is suggested for the evaluation of the crystal lifetime.
Qualitative data analysis software

- Nud*Ist
- Atlas
- Etnograph
- Weft QDA
# Coding scheme

<table>
<thead>
<tr>
<th>Emerald</th>
<th>ISO</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PURpose</td>
<td>• Background</td>
</tr>
<tr>
<td>• Design/Methodology/Approach</td>
<td>• Purpose/scope</td>
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<tr>
<td>• FINdings</td>
<td>• Hypothesis</td>
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<tr>
<td>• Research</td>
<td>• Method</td>
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<tr>
<td>• Limitations/Implications</td>
<td>• Results</td>
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<tr>
<td>• PRactical Implications</td>
<td>• Conclusions and discussion</td>
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<tr>
<td>• SOcial Implications</td>
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<tr>
<td>• ORiginality/Value.</td>
<td>• Topical sentence</td>
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</tbody>
</table>

New category
Findings: Length of abstracts

<table>
<thead>
<tr>
<th>Journal</th>
<th>Sentences</th>
<th>Words</th>
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<td>218</td>
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</tbody>
</table>

4 CZ journals
1 SI journal Knjižnica
1 international Journal of Documentation
Findings: Contents of abstracts

<table>
<thead>
<tr>
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<tr>
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</tr>
</tbody>
</table>
Average content structure of abstracts

- **JDoc**
  - Method: 24%
  - Purpose: 23%
  - Results: 23%
  - Conclusions: 20%
  - Background: 10%
  - Hypothesis: 0%

- **SI**
  - Results: 47%
  - Purpose: 12%
  - Background: 28%
  - Conclusions: 4%
  - Hypothesis: 1%
  - Method: 8%

- **CZ**
  - Results: 10%
  - Method: 14%
  - Purpose: 26%
  - Background: 43%
  - Conclusions: 7%
  - Hypothesis: 1%
Prototypical abstracts

**ILS: 6 sentences**
- 3 topical and/or background sentences (e.g. 2 topical, 1 background or 1 topical and 2 background)
- 1 purpose
- 1 method

**Materials sci.: 8 sentences**
- 3 background sentences,
- 1 methodology, design/methodology/approach sentence,
- 2 results, findings sentences and
- 1 sentence with practical implications
Recommendation for ILS students and scholars

- 6 sentences
  - 1 topic sentence
  - 1 background sentence
  - 1 purpose/scope/aim
  - 1 method
  - 1 results
  - 1 conclusions and discussion

- If space available: Provide results!
Sources