



DINI Zertifikat 2007

Frank Scholze
Universitätsbibliothek Stuttgart

Erfahrungsaustausch DINI-zertifizierter Dienste
Berlin, 6.12.2006



DINI Zertifikat

Inhalt

- Sichtbarkeit des Gesamtangebotes
- Leitlinien (Policy)
- Autorenbetreuung
- Rechtliche Aspekte
- Sicherheit, Authentizität und Integrität
 - Server
 - Dokumente
- Erschließung
 - Sacherschließung
 - Metadatenexport
 - Schnittstellen
- Zugriffsstatistik
- Langzeitverfügbarkeit



DINI Certificate Visibility of the Service (**neu**)

Minimum standards

- The entire range of services must be available on the internet
- Service must be referenced from the institution's homepage

Recommendations

- Registration of the Document and Publication Services at the Directory of Open Access Repositories - OpenDOAR or the Registry of Open Access Repositories (ROAR)
- Registration of the Document and Publication Services at the Open Archives Initiative as Data-Provider



DINI Certificate Policy / Guidelines

Minimum standards

- A policy regarding content and operation of the repository. This policy must state terms and conditions (rights and obligations) of the provider and of authors and/or editors.
- The policy must contain:
 - Which documents will be included
 - Functional and technical qualities of the documents
 - A guarantee to archive published documents for a defined time
 - Procedures for the operation of the document repository



DINI Certificate Policy / Guidelines (2)

Minimum standards

- Definition of the services offered to the authors and/or editors
- Specification of terms and conditions (rights and obligations) of authors and/or editors
- **Statement on Open Access**

Recommendations

- **If there is an Open Access Statement, the term OA has to be defined**
- **Action guideline for authors (green or gold strategy)**
- **Tools and services have to be offered in accordance to action guidelines (upload, versioning, authentication ...)**



DINI Certificate Author support

Minimum standards

- Offer consultancy services and support via web pages and/or e-mail and/or telephone as well as person-to-person support
- Support of the entire publication process (including technical and legal areas)
- Action guideline for authors
- **Self-Upload tool**
- **Link to SHERPA/ROMEAO list on publisher's policies**



DINI Certificate Author support (2)

Recommendations

- Courses on electronic publishing at least once per semester
- Courses on structured writing
- Helpdesk system
- Provide style sheets or templates
- “how-to manuals” for download (e.g. on PDF creation)
- Advice on usage and citation of documents
- Advice on copyrights
- Interfaces and help in German and English



DINI Certificate

Legal aspects

Minimum standards

Author's Copy

- The work is published elsewhere or is in the process of being published elsewhere. Copyrights were or will be transferred to a third party
- The author publishes the document under a license (Creative Commons, DPPL Digital Peer Publishing Licence) that permits hosting the publication on the institutional repository and does not contradict the transfer of copyrights
- The author's contract allows to publish a digital author's copy
- An addendum to the author's contract allows to publish an authors copy
- Publication of digital author's copies is covered in the respective publishing houses' policies



DINI Certificate

Legal aspects (2)

Minimum standards

Primary Publications

- No copyrights or no exclusive rights were transferred to a third party
- An agreement (author contract) has to be signed by the author allowing the end users free electronic distribution of the document and stating the conditions for this (rights to store electronically, especially in databases, and make available to the public for individual retrieval to view on a monitor and print (online use) in part and/or as a whole)
- Should an additional publication in e.g. a journal be intended, the author should make certain that the publishing house supports the primary publication on an institutional repository



DINI Certificate

Security, Authenticity and Data Integrity - Server

Minimum standards

- The operational concept guarantees adequate availability of the system
- Documentation of the technical system
 - version and on the technical parameters of all components
 - access regulations (location, system, personnel)
 - Regulations on system maintenance
- Back-up system to secure repository software, metadata and documents on a daily basis
- Reliable installation of the system and the software components
- Regular system maintenance (security updates, software updates and response to malfunctions)
- Technically controlled and traceable upload of documents



DINI Certificate Security, Authenticity and Data Integrity - Server (2)

Recommendations

- SSL certification with trusted certificate for encoded communication
- Separation of the technical system documentation in a public and an internal section
- Autonomous controlling and alerting functions in case of a malfunction of the server or one of its components
- Damage-control procedures in place



DINI Certificate Security, Authenticity and Data Integrity - Documents

Minimum standards

- Use of Persistent Identifiers (systems providing a resolving service, e.g. urn:nbn or DOI)
- A document with altered content must be treated as a new document (new persistent identifier)
- Archiving of uploaded original files in their original formats
- Minimum standards must be documented in the policy or the guidelines of the Document and Publication Services



DINI Certificate

Security, Authenticity and Data Integrity - Documents (2)

Recommendations

- Application of a procedure to verify the integrity of documents (e.g. a hash number) as well as the publication of the procedure and hash value
- Application of advanced digital signature (according to German Digital Signature Act § 2)
- Rendering of archival file-formats for the export of documents into long-term archiving facilities or institutions (e.g. PDF/A, ODF, TXT)
- Presentation of the documents in an established presentation fileformat
- Should this not be possible, applicable software should be offered for download, or an internet reference be given



DINI Certificate Subject Indexing

Minimum standards

- An indexing policy must exist and be known to the authors
- Verbal indexing with free keywords or classification terms
- **Dewey Decimal Classification (DDC) according to DINI OAI-Recommendations**

Recommendations

- At least one additional standardized system of verbal or classificatory indexing (general or subject specific, e.g. German Schlagwortnormdatei, LoC Subject Headings, CCS, MSC, PACS etc.)
- Keywords in English
- Abstracts in German and English



DINI Certificate Metadata Export

Minimum standards

- Metadata are available for free
- Metadata are structured as Dublin Core (ISO 15836:2003)

Recommendations

- Metadata are structured as Dublin Core Qualified
- Metadata are structured as ONIX
- Technical and/or archival metadata including Print-on-demand data (e.g. PREMIS, LMER)
- **Import** and export of metadata in bibliographical databases (e.g. reference-management software, Union catalog, OPAC etc.)
- **Offer link lists for search engines' indexing robots (e.g. Google, Fast, Scirus, etc.)**



DINI Certificate Interfaces

Minimum standards

- Web interface for users
- OAI-PMH 2.0 in accordance with DINI-OAI Recommendations

Recommendations

- OAI-PMH 2.0 to exchange complex metadata schemas
- Web-service interface (e.g. SOAP)
- Z39.50 and/or **SRU/SRV**



DINI Certificate Logs and Statistics

Minimum standards

- Every document repository must keep consistent access statistics (web server log files)
- Web server log files must be anonymized for long-term archiving purposes
- Criteria used to collect or filter the data must be documented

Recommendations

- Access to documents by automated agents, robots or similar is filtered out
- Web server log files are edited according to the Counter Code of Practice
- Access statistic is attached to the document as dynamic metadata and visible to the end-user



DINI Certificate

Long term availability

Minimum standards

- Persistent linking of metadata and documents (e.g. via a persistent identifier or through storage of metadata and document in one single container)
- Minimum availability of at least five years
- Archival copies free of Digital Rights Management (DRM) constraints



DINI Certificate

Long term availability (2)

Recommendations

- Secure long-term availability, where necessary through cooperation with an archiving institution
- Use of open file formats suited for long-term archiving (e.g. PDF/A, ODF, TXT, HTML, TEX) and free of protective DRM measures
- Creation of technical metadata for long-term archiving (e.g. using the tool JHOVE).
- Unambiguous identification of the file format in the metadata with a link to publicly available file format registries
- Policy on the deletion of documents
- Support import and export of object containers that – besides the actual document – contain bibliographical and technical metadata (e.g. in the Universal Object Format)



Visibility - an example

Uploaded to OPUS 23.1.2006



 English

Hinweis zum Urheberrecht

Aufsatz zugänglich unter

URN: [urn:nbn:de:bsz:93-opus-25204](https://nbn-resolving.org/urn:nbn:de:bsz:93-opus-25204)

URL: <http://elib.uni-stuttgart.de/opus/volltexte/2006/2520/>

A disposable acetylcholinesterase-based electrode biosensor to detect anatoxin-a(s) in water

Villatte, Francois ; Schulze, Holger ; Schmid, R. D. ; Bachmann, T. T.

Originalveröffentlichung: (2002) *Anal Bioanal Chem.* 2002 Jan;372(2):322-6. The original article is available at <http://springerlink.metapress.com/openurl.asp?genre=article&id=doi:10.1007/s00216-001-1127-4>

pdf-Format: [Dokument 1.pdf \(158 KB\)](#)

Dokument empfehlen:



SWD-Schlagwörter:

Biosensor ; Acetylcholinesterase ; Anatoxin a ; Amperometrie

**Freie Schlagwörter
(Englisch):**

Biosensor ; Acetylcholinesterase ; Anatoxin-a(s) ; Amperometric detection

Institut:

Institut für Technische Biochemie

DDC-Sachgruppe:

Chemie

Dokumentart:

Aufsatz

Sprache:

Englisch

Erstellungsjahr:

2002

Publikationsdatum:

23.01.2006

Kurzfassung in Englisch: Anatoxin-a(s) is a hazardous toxin released by cyanobacteria during bacterial blooms. A simple and fast method to detect this hazardous compound using a biosensor based on the electrochemical detection of the activity of acetylcholinesterase was developed. Among several acetylcholinesterases, electric eel enzyme was found to be the most sensitive to anatoxin-a(s) and was thus used to build disposable amperometric sensors. The system displayed a detection limit of 1 µg/L anatoxin-a(s). No unspecific effect was noticed with real water samples but spiked toxin was accurately detected. Oxime reactivation was used to discriminate between the toxin and potential insecticides present in the sample.



SCIRUS - Search result 16.2.2006

SCIRUS
for scientific information only

SCIRUS - Your search - Search - Pop-up Blocker OFF - Highlight

Highlight your search with the **SCIRUS** Toolbar!

About Us | Newsroom | Advisory Board | Submit Web Site | Help | Contact Us

Basic Search

[Advanced Search](#) [Search Preferences](#)

disposable acetylcholinesterase-based electrode biosens

Search

Journal sources Preferred Web sources Other Web sources Exact phrase

Searched for: All of the words **disposable** AND **acetylcholinesterase-based** AND **electrode** AND **biosensor**

Found: **211 total** | [104 journal results](#) | [30 preferred web results](#) | [77 other web results](#)

Sort by: **relevance** | [date](#)

[Save checked results](#)

[Email checked results](#)

[Export checked results](#)

1. [OPUS - A disposable acetylcholinesterase-based electrode biosensor to detect anatoxin-a\(s\) in water \[81K\]](#)

Feb 2006

...Bachmann, Till T. A **disposable acetylcholinesterase-based electrode biosensor** to detect anatoxin-a...compound using a **biosensor based** on the electrochemical...the activity of **acetylcholinesterase** was developed...used to build **disposable** amperometric...

[more hits from](#) [http://elib.uni-stuttgart.de/opus/volltexte/2006/2520/]

[similar results](#)

2. [A disposable acetylcholinesterase-based electrode biosensor to detect anatoxin-a\(s\) in water.](#)

F Villatte / H Schulze / R D Schmid / T T Bachmann, *Anal Bioanal Chem*, Jan 2002

...hazardous compound using a **biosensor based** on the electrochemical...of the activity of **acetylcholinesterase** was developed. Among several **acetylcholinesterases**, electric eel enzyme...thus used to build **disposable** amperometric sensors...

MEDLINE/PubMed Citation on

[view all 2 results from MEDLINE/PubMed](#)

[similar results](#)

Refine your search using these keywords found in the results:

[amperometric biosensor](#)

[analytica chimica acta](#)

[biosensors](#)

[carbamate pesticides](#)

[detection of pesticides](#)

[enzyme electrode](#)

[immunosensor](#)

[organophosphates](#)

[organophosphorus hydrolase](#)

[pesticides](#)

[porphyrin](#)

[potentiometric](#)

Google - Search result 1.2.2006



Google [Erweiterte Suche](#)
[Einstellungen](#)

Web-Suche Suche Seiten auf Deutsch

Web Ergebnisse 1 - 10 von ungefähr 224 für **disposable acetylcholinesterase-based electrode biosensor**.

Tipp: Suchen nur nach Ergebnissen auf **Deutsch**. Sie können Ihre bevorzugten Spracheinstellungen in [Einstellungen](#) angeben.

Wissenschaftliche Artikel zu [disposable acetylcholinesterase-based electrode biosensor](#)

- [A disposable acetylcholinesterase-based electrode ...](#) - by Villatte - 5 citations
- [Sensitive Detection of Organophosphorus Pesticides Using ...](#) - by Turdean - 6 citations
- [Biosensors for the detection of bacteria](#) - by Deisingh - 3 citations

OPUS - A [disposable acetylcholinesterase-based electrode biosensor ...](#)

A **disposable acetylcholinesterase-based electrode biosensor** to detect ...
SWD-Schlagwörter: **Biosensor**, Acetylcholinesterase, Anatoxin a, Amperometrie ...
elib.uni-stuttgart.de/opus/volltexte/2006/2520/index.html - 81k - [Im Cache](#) - [Ähnliche Seiten](#)

[PDF] [A disposable acetylcholinesterase-based electrode biosensor to ...](#)
Dateiformat: PDF/Adobe Acrobat - [HTML-Version](#)
A **disposable acetylcholinesterase-based electrode biosensor** to detect anatoxin-a(s) in water. F. Villatte, H. Schulze, RD Schmid and TT Bachmann, ...
elib.uni-stuttgart.de/opus/volltexte/2006/2520/pdf/villatte2002.pdf - [Ähnliche Seiten](#)
[[Weitere Ergebnisse von elib.uni-stuttgart.de](#)]

[A disposable acetylcholinesterase-based electrode biosensor to ...](#) - [[Diese Seite übersetzen](#)]

Anatoxin-a(s) is a hazardous toxin released by cyanobacteria during bacterial blooms. A simple and f...
www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11936106&dopt=Abstract - [Ähnliche Seiten](#)

[PDF] [A disposable acetylcholinesterase-based electrode biosensor to ...](#)
Dateiformat: PDF/Adobe Acrobat
A **disposable acetylcholinesterase-based electrode biosensor**. to detect anatoxin-a(s) in water. Anal Bioanal Chem (2002) 372:322-326 ...





Google Scholar - Citation analysis



disposable acetylcholinesterase-based electrode

Suche

[Erweiterte Scholar-Suche](#)

[Scholar-Einstellungen](#)

[Scholar-Hilfe](#)

Web-Suche Suche Seiten auf Deutsch

Scholar

Ergebnisse 1 - 10 von ungefähr 11 für **disposable acetylcholinesterase-based electrode biosensor**. (0.06 Sekunden)

[Alle Artikel](#) [Neueste Artikel](#)

[A disposable acetylcholinesterase-based electrode biosensor to detect anatoxin-a \(s\) in water - alle 6 Versionen »](#)

F Villatte, H Schulze, RD Schmid, TT Bachmann - *Analytical and Bioanalytical Chemistry*, 2002 - Springer

... F. Villatte · H. Schulze · RD Schmid · TT Bachmann A **disposable acetylcholinesterase-based electrode biosensor** to detect anatoxin-a(s) in water ...

Zitiert durch: 5 - [Websuche](#)

[... a Needle Type Amperometric Acetylcholinesterase-based Bioelectrode. Thiocholine Electrochemistry ... - alle 5 Versionen »](#)

GLS Turdean, ICS Popescu, LS Oniciu, DRS Thevenot - *Journal of Enzyme Inhibition and Medicinal Chemistry*, 2002 - Taylor & Francis

... of the needle type **acetylcholinesterase based** bioelectrode (AChE ... at Pt rotating disk **electrode**: 0.250 V vs ... necessary to compensate the **biosensor** deactivation due ...

Zitiert durch: 6 - [Websuche](#)

[Performance of the Amperometric Biosensor with Immobilized Butyrylcholinesterase in Organic Solvents - alle 3 Versionen »](#)

P Skladal, J Krejčí - *Collection of Czechoslovak Chemical Communications*, 1996 - cccc.uochb.cas.cz

... also for the **acetylcholinesterase-based** sensor 15 ... the previously developed **disposable biosensor** based on ... indicated against the internal reference **electrode**. ...

Zitiert durch: 2 - [Websuche](#)