CRS Abstract Submission Guidelines & Procedures

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Introduction

There's No Better Time or Place to Share Your Best Research

This year's program ***Creating Value Through Customised Delivery*** offers an exceptional opportunity to reach a diverse audience in the discovery, development, and delivery continuum.

New for 2015!

Call for Abstracts Organized Around 10 Core Areas

This year, cohesive programming will be built around 10 Core Areas in delivery science. When you submit your abstract, you will choose a primary and secondary core area relevant to your topic.

Scientific Session Format

Based on valuable feedback from members and attendees, 20 Scientific Sessions will be developed using the following formula. This approach will allow the CRS Annual Meeting Program Committee to build a program that offers:

- greater industry participation
- more time for Q&A among speakers and session attendees
- brief research updates with further opportunity to discuss a scientific poster presentation
- value-added moderation by esteemed CRS Fellows

Important Information to Know Before Submitting

Visa Information

It is the responsibility of the designated presenting author to determine their visa requirements to enter the United Kingdom. CRS strongly encourages the presenting author and all future

attendees to review the visa requirements and to begin the visa application (as applicable) as soon as possible. ***Registration fees will NOT be refunded due to inability to obtain a visa.***

Notification

- Acknowledgement of submission will be e-mailed to the author as the primary contact.
- The designated presenting author will be notified of the abstract status in April 2015.
- All future communications will be sent to the designated presenting author.
- The designated presenting author should also be the corresponding author.
- The designated presenting author must register for the annual meeting and pay the fee by May 14, 2015.
- If the designated presenting author is not registered, the abstract will be withdrawn and will not be included in the annual meeting program book or available in the online abstract database.

View/Edit/Withdraw Your Abstract

- You may view, edit, or withdraw your abstract submission(s) by using the link provided to you in the confirmation e-mail sent to the author designated to receive the submission confirmation once the abstract has been submitted.
- Abstract submissions may be edited or withdrawn only during the submission period of mid-November, 2014 – January 15, 2015 (11:59 p.m. Central Standard Time).
- Abstracts can be viewed at any time.

Abstract Submission

If accepted, you will be part of the scientific program in the form of either a Research Highlight Talk with poster OR poster presentation only.

- **Abstracts for the 2015 CRS Annual Meeting & Exposition will be accepted mid-November 2014 – January 15, 2015 (11:59 p.m. U.S. Central Standard Time).** Abstracts must be submitted online only. No other form of submission will be accepted.
- All authors are expected to review this document prior to submitting.

How to Prepare Your Abstract

1. Review the “Preparing for Abstract Submission” section of this document
2. Read the 2015 Session Topics and Descriptions
3. Use the Model Abstract (Appendix I) when developing your abstract. It must be 2 pages in length as demonstrated in model abstract.
4. We also off an Abstract Template to aid in writing your abstract. Requirements for the abstract are outlined in the template.

Abstract Preparation Checklist

- ❒ Abstract prepared and formatted as outlined in the Preparing for Abstract Submission section. Abstracts that are not properly prepared and formatted are subject to automatic rejection.
- ❒ Abstract has not been previously submitted for consideration in other competitions or meetings.
- ❒ Abstract (subject to acceptance) will be presented as placed (research highlight talk with poster or poster presentation only) by the CRS Annual Meeting Program Committee.
- ❒ License is granted to CRS to publish the abstract (subject to acceptance) online. Abstracts will be published on June 26, 2015.
- ❒ Designated presenting author to be registered for the CRS annual meeting and paid the fee by May 14, 2015.

10 Core Areas

1) Delivery of Proteins, Peptides, and Vaccines

Therapeutic peptides, proteins, and vaccines represent the fastest growing sector in pharmaceutical products and are used globally to treat and prevent debilitating diseases. Various challenges must be overcome to maximize the therapeutic and prophylactic effectiveness of protein- and peptide-based products and vaccines and increase patient adherence. This CRS core area covers all aspects related to macromolecular therapeutics and vaccines and their development into products for humans and animals, including innovations in delivery science, devices, and technologies that improve targeted delivery, extend duration of action, enhance immunization efficacy, minimize delivery invasiveness, increase stability of molecules in the delivery system, improve adherence, and/or lower development/manufacturing costs.

2) Delivery Science in Cosmetics, Personal Care, and Household Products

This CRS core area covers all aspects of controlled release in personal and home care areas. Examples are cosmetics, cosmeceuticals, skincare, fragrances, deodorants and antiperspirants, hair care, mouth care, air fresheners, cleaning and sanitizing agents, and insect/pest/mold control agents and devices. This core area seeks to promote progress and applications across this diverse range of products, with particular emphasis on the research and manufacturing activities ongoing in the relevant industries.

3) Encapsulation for Industrial Applications

This CRS core area focuses on advances in encapsulation and controlled release products in agrochemicals, agriculture, aquaculture, textiles, and other industrial applications. Topic areas include, but are not limited to, more efficient biomass production for biofuels, genetic engineering (release of genetically engineered materials, enhancing organisms), anticorrosive and/or antifouling coatings (e.g., fish farms or offshore installations), self-healing coatings and materials (e.g., textiles), water storage systems, technologies for high-rise systems (fertilizing, light control), and more traditional areas involving controlled release of nutrients, vaccines, fertilizers, and pesticides.

4) Manufacture, Characterization, Measurement, and Stability

The reliable manufacture, stability, and performance of controlled release products are key to commercial success. This CRS core area covers the technology development through scale-up of commercially viable processes and methods to prepare and characterize products designed for controlled release of active materials. Some examples of process technologies include spray-drying, hot-melt extrusion, co-precipitation, supercritical fluid technology, fluid bed coating, complex coacervation, 3D printing, inkjet printing, electrospinning, microfluidics, powder layering techniques, high-shear granulation techniques, membrane processes, and emulsion-based processes. The use of quality-by-design (QbD) concepts, analytical technologies for process end-point and real-time monitoring of preparation processes, imaging methods, and other approaches to ensure commercial viability are also critical to this core area. This core area brings together professionals from small and large pharma, consumer and diversified products industries, human and animal health industries, CROs/CMOs, excipient companies, and academia. Submissions are sought that advance fundamental knowledge in this core area including 1) novel formulations, technologies, excipients, or strategies; 2) analytical or processing innovations; 3) innovative *in vitro*, *ex vivo*, and animal model development; 4) imaging technologies; 5) scientific investigations of established technologies, including

troubleshooting and QbD case studies; or 6) scale-up, regulatory, safety, and cost considerations.

5) Micro- and Nanoparticle Delivery

This CRS core area focuses on innovative micro- and nano-based delivery systems, for example, for diagnostic and/or therapeutic purposes in humans and animals, consumer products, cosmetics, and foods. Micro- and nanoparticles of all types fall within the scope of this area, including lipid nanoparticles, liposomes, polymeric nanoparticles, polymeric micelles, polymersomes, drug/active-polymer conjugates, drug-antibody conjugates, inorganic nanocarriers, hybrid nanosystems, and other forms that offer the potential for improved delivery. Topics of interest are broad and include passive and active targeting, techniques for incorporation of agents, modeling of particles, design issues related to particulate products, methods for attachment of targeting ligands, regulation of behavior by modification of particle physicochemical properties, methods for regulation of particle interactions with cellular and tissue structures, compatibility of particles in final formulation or matrix, and more.

6) Oral Delivery for Food and Pharma

This CRS core area is concerned with all aspects of oral delivery science and product development, including immediate, sustained, delayed, and pulsed release. It includes oral delivery of drugs (from small molecules to biologics), food, feed, beverages, nutrients, nutraceuticals, flavors, probiotics, prebiotics, and supplements. Topics of interest are broad and include, but are not limited to, all aspects of systems that enhance oral absorption, introduce prolonged effect and stability of additives, product acceptability (including taste masking, rheology, etc.), targeted and/or more uniform delivery in the GI tract, *in vitro* and *in vivo* models, analytical chemistry, formulation technology for poorly soluble agents, biopharmaceutics, equipment design, and computational modeling.

7) Parenteral Controlled Release

This CRS core area is concerned with the research, development, and commercialization of parenteral sustained release delivery systems. Key stakeholders from small to large pharma, drug delivery CROs/CMOs, excipient companies, and academia are involved in this area. Topics of interest include, but are not limited to 1) novel materials, dosage forms/devices, processes, or development strategies; 2) fundamental understanding of established technology, including modeling and characterization; and 3) industrial product development case studies, including regulatory aspects. Methods for, and examples of, discovery-to-development transitions and bench- to full-scale commercial manufacture are within the scope of this core area.

8) Regional Delivery

This CRS core area covers the science behind, and development of, delivery technologies that are applied locally, as often occurs in delivery to the eyes (drops, gels, and injectables), lungs (inhalation), nose (sprays/drops), brain (implants, local infusion), female reproductive tract (rings, gels, solutions), mouth (e.g., buccal patches), and other site-specific local applications. This core area is open to all aspects related to regional delivery. Examples are basic science to product development, new biomaterials, formulation strategies, small and large molecules, nucleic acid therapies, vaccines, new devices, clearance of controlled release systems, safety of new materials/excipients, *in vitro* and *ex vivo* models, animal models, and mathematical and computational modeling.

9) RNA and DNA Delivery

The promise of nucleic acid-based therapies is enormous, but delivery challenges have greatly limited the realization of this potential. This CRS core area encompasses both fundamental and applied aspects of DNA and RNA delivery, including design and synthesis of carriers, their characterization, and all aspects of product development with this unique class of agents. Intracellular delivery is essential to the efficacy of nucleic acid-based therapies; thus, advances in this area with nucleic acids or even other molecules (such as small molecules and proteins) are crucial to this CRS core area.

10) Topical and Transdermal Delivery

This CRS core area is concerned with fundamental and applied aspects, including product development, related to topical and transdermal delivery. Progress in novel delivery systems and formulations, including patches, microneedles, and other devices, as well as analytical assessments of these systems, falls within the scope of the area. In addition, fundamental new insights into permeation pathways, proof-of-concept studies in preclinical and clinical settings, novel materials/excipients, physical methods that facilitate topical or transdermal delivery, and all classes of molecules are part of this core area of activity.

Preparing for Abstract Submission

Review the information below before using the online submission form. Login using your Member/Customer Username and Password; nonmembers with no login will need to "Create a New Account." A confirmation email will be sent to the person designated to receive the submission confirmation. Check both regular and junk e-mail folders for receipt of the confirmation notice.

A. Author Information

- Author designation (one author must be designated as the presenter)
- First Name
- Middle Initial
- Last Name
- Affiliation (list name of company/institution only – do not include departments, street addresses, city, state or province, postal code, or country)
- Country
- Telephone
- Fax
- Email
- Is Author a Student or Postdoc?
- Send communications to this author (it is recommended that the presenting and corresponding author be the same)
- To add an author click "Enter/Add Presenter/Authors"
- When all authors are added to the form click "Author List Complete"
- Note: Authors not listed in the submission form will not be listed in the program book

B. Presentation Information

- Presentation Type: Abstract (*The CRS Annual Meeting Program Committee will determine the placement of the abstract (subject to acceptance)*
- Presentation Title (limited to 175 characters including spaces)
- Invitation Code *(If you have not received an invitation code, please leave blank)*
- Primary Track of Interest (Bioactive Materials, Consumer & Diversified Products, Preclinical Sciences & Animal Health)
- Presentation Primary Core Area (select one)
- Presentation Secondary Core Area (select one)

C. Presentation Abstract

- View the Model Abstract (Appendix I) before preparing your abstract
- Formatting Your Abstract
    - Select "Letter" (8½ X11 inches [21.59 X 27.94 cm] in Page Setup
    - Set margins (left and right, top and bottom) to .75 inch (1.91 cm)
    - Accepted font is 10-12 point Arial, Times, Times New Roman, or Helvetica
    - Title is in bold type and centered across the page
    - Author names are centered and identified with number superscripts to correspond to author affiliations. Underline the designated presenting author's name

    - Author affiliations are centered and identified with number superscripts to correspond to the respective author name; include the designated presenting author's email address
    - Abstract body alignment is justified with the first line of each paragraph indented .25 inch (.63 cm)
    - Abstract body format is two-column (3.25 inches [8.25 cm] per column) with 0.5 inch (1.27 cm) between columns
    - Include one line of space between the title and the name(s) of the author(s), between author name(s) and affiliation(s), and between sections
    - Abstract must be 2 pages (see Model Abstract) and no more than 2 pages
    - References must be numbered; there are no lines of space between references
- An Abstract Template (Appendix II) is available for preparing your abstract. Replace the sample text (title, author listing, author affiliations, designated presenting author's email address, and abstract text) in the template with your abstract title, author listing, author affiliations, email address and text.
- Abstract Content
    - *Heading:* The abstract heading spans both columns and must contain the abstract title, the names and affiliations of all authors, and email address of the designated presenting author. Note: You must repeat this information in the abstract submission form. **Author names that are not included in the submission form will not appear in the program.**
    - *Body Text:* The abstract body is in two-column format and must include the following subjects: Abstract Summary, Introduction, Experimental Methods, Results and Discussion, Conclusion, References; Acknowledgments are optional but recommended. Statistical analysis must be included in the abstract text.
- When you are certain the abstract is complete and accurate, convert the abstract to .pdf and save the file to a local drive. ***Only .pdf files will be accepted. Microsoft Word or text files are NOT accepted.***
- To upload your abstract click "Browse" to select your file and then click "Upload File" to upload the abstract to the submission form

D. Presentation Award

- If submitting this abstract for annual meeting best paper award, select the appropriate award from the list.
- To be eligible for graduate/postdoctoral awards, the presenting author must be currently enrolled in a graduate student program or postdoc that has graduated no later than January 2012. The presenting author must be a current paid member of the Controlled Release Society.

E. Terms & Conditions

- If the abstract is accepted, I agree that the designated presenting author will present the abstract at the 42nd Annual Meeting & Exposition of the Controlled Release Society, July 26-29, 2015, in Edinburgh, Scotland, and will register and pay the registration fee by May 14, 2015. I confirm that this is an original work and that the abstract has not been previously published. I and any contributing authors, as sole proprietors of the abstract, agree to transfer copyright of the abstract to the Controlled Release Society. Abstracts

will be published online on June 26, 2015. By agreeing, I accept this copyright transfer. I understand that failure to accept the copyright transfer will result in the immediate cancellation of my abstract submission.

Criteria for Acceptance

The criterion for acceptance of presentation at the CRS Annual Meeting and Exposition is based on an anonymous peer-review process. The author must obtain the necessary permissions prior to submission of the abstract.

The CRS Annual Meeting Program Committee reserves the right to evaluate, accept, or reject any submitted abstract. The committee will determine the status (accept or reject) of all submitted abstracts and the placement (research highlight talk with poster or poster presentation only) of all accepted abstracts. The committee may also switch abstracts to any topic category based on their evaluation and organization requirements. Remember:

- Abstract should fit within one of the 10 core areas (must choose at least one)
- Remember to edit and proof your abstract before submitting. Early submissions are encouraged to avoid delays on the last day
- Abstract must be written in clear English
- Abstract must be two pages (See Model Abstract, Appendix I)
- If not all data (example: active compound used) can be disclosed due to confidentiality, the abstract will not be rejected immediately; however, the reviewers will decide whether or not it contains enough interesting insights for acceptance.

If the abstract is accepted, the designated presenting author must register by May 14, 2015, for the 42nd CRS Annual Meeting, July 26-29, 2015, in Edinburgh, Scotland, and must agree to present the abstract at the annual meeting. If the designated presenting author is not registered, the abstract will be withdrawn and will not be included in the program or 42nd Annual Meeting online abstract library. If you do not present your abstract or if your poster is not displayed during the designated poster times your abstract will be removed from the online abstract library.

The submitter confirms that the abstract is an original work and has not been previously published. The submitter and any contributing authors, as sole proprietors of the abstract, agree to transfer copyright of the abstract to the Controlled Release Society. Abstracts will be published online on June 26, 2015. By agreeing, the submitter accepts the copyright transfer. Failure to accept the copyright transfer will result in the immediate cancellation of the abstract submission.

Notification of acceptance will be e-mailed in April to the presenter only.

Abstracts Permission

Submission Permissions

Submitting author must obtain the necessary permissions for research prior to abstract submission. The Controlled Release Society does not assume any liability or responsibility for publication of any submitted abstracts.

Copyright Assignment

Submitting author confirms that the abstract is an original work and has not been previously published. The submitter and any contributing authors, as sole proprietors of the abstract, agree to transfer copyright of the abstract to the Controlled Release Society. Abstracts will be published online on June 26, 2015. By agreeing, the submitter accepts the copyright transfer. Failure to accept the copyright transfer will result in the immediate cancellation of the abstract submission.

Copyright Permissions

Publication of tables, charts, and graphs projected onto screens or posted at the annual meeting by anyone other than an author or presenter is prohibited unless a release has been requested and received in writing from an author or presenter.

Agreement to Present

Designated presenting author must agree to present the poster abstract (subject to acceptance) at the CRS Annual Meeting and Exposition.

Agreement to Register

Designated presenting author of the abstract (subject to acceptance) must register for the annual meeting and pay the fee by May 14, 2015. If the designated presenting author is not registered by May 14, 2015, the abstract will be withdrawn and will not be included in the program guide or the online abstract library.

If you do not present your abstract or if your poster is not displayed during the designated poster times your abstract will be removed from the online abstract library.

Review Procedure

All abstracts submitted to the CRS Annual Meeting will go through a rigorous review procedure to maintain the highest scientific quality of the meeting. Submitted abstracts must meet the following minimum requirements:

1. Significant and original contribution within the scope of the Controlled Release Society.
2. Abstract submitted by the deadline.
3. Written in clear English.
4. Few syntax/spelling mistakes.
5. Sufficient data presented, adequately analyzed and discussed with appropriate conclusions supported by the data. If not all data (example: active compound used) can be disclosed due to confidentiality, the abstract will not be rejected immediately; however, the reviewers will decide whether or not it contains enough interesting insights for acceptance.
6. Meets format guidelines.
7. Contains data and tables and figures, clearly presented, to support the data.

Abstract Review

The abstract will be read and scored by the CRS Annual Meeting Program Committee and will be assigned a score based on the following assessment criteria for scientific content:

Score	Criteria
5	Ground-breaking research of outstanding quality in a new or emerging field.
4	New research of outstanding quality providing a new perspective in an existing field or new research of high quality in a new or emerging field.
3	New research of high quality that provides an enhancement of current understanding in an existing field and/or is of industrial relevance/interest.
2	Research providing support of current understanding; representing modest or no addition to current understanding in an existing field over and above previously published work; not sufficiently significant and/or original research.
1	Abstract does not comply with minimum submission instructions, is not submitted in the proper format, and/or does not include all required fields. A score of 1 will result in the rejection of an abstract.

Appendix

Appendix I – Model Abstract

Fluorescent Monitoring of Microcapsule Oxidation

James D. Oxley, Jenny J. Finkbiner, Nitin Nitin
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james.oxley@swri.org

ABSTRACT SUMMARY

A novel microcapsule oxidation monitoring system was developed based on the introduction of a fluorescent oxygen sensitive dye into a microcapsule core material. Exposure of the microcapsules to oxygen results in a reversible decrease of the fluorescent signal, allowing for simple monitoring of the microcapsule core oxidation and shell performance.

INTRODUCTION

The development of microcapsule formulations for the protection of oxygen sensitive materials requires quantification of core material oxidation to measure shell material performance. Proper quantification often involves multi-step techniques to extract the encapsulated material, and development or adaptation of an assay that is unique to the core material. Extraction of the core materials requires destruction of the sample. Assays typically require the setup and operation of a Gas Chromatograph Mass Spectrometer (GCMS) or High Performance Liquid Chromatograph (HPLC). While these methods provide valuable insight into microcapsule performance for a particular core material, they are time consuming and yield data that is difficult to compare to other encapsulation systems formulated with different core materials. We recently developed a novel microcapsule oxidation monitoring system using an oxygen sensitive fluorescent dye.

The oxidation monitoring system is based on the use of an oxygen sensitive fluorescent dye, tris(4,7-diphenyl-1,10-phenanthroline) ruthenium(II) bis(hexafluorophosphate) complex.[1, 2] When incorporated into a microcapsule core and excited with an ultra-violet light source, the dye provides a spectrophotometric signal that is sensitive to the presence of oxygen. Assuming the microcapsule wall does not absorb or fluoresce light at wavelengths that interfere with the dye, oxidation can be monitored without destruction of the capsule. Fluorescence measurements can be obtained quickly in comparison to HPLC or GCMS assay techniques commonly used to quantify oxidation. For our system, an inert internal fluorescent standard was included with the oxygen sensitive dye to compensate for changes in capsule concentration that may be experienced during sampling and analysis.

EXPERIMENTAL METHODS

Microcapsules for analysis were prepared using complex coacervation. An example preparation is as follows: 10 g of 300 Bloom Type A gelatin was dissolved in 400 mL of deionized water at 60ºC. 40 g of core material was homogenized into the gelatin solution to form droplets less than 100 µm in diameter. 20 mL of 5% sodium hexametaphosphate solution was added to the solution, followed by lowering of the pH to approximately 4.8 with 10% acetic acid. The reaction mixture was then cooled to room temperature, followed by crosslinking with 5 mL of 25% gluteraldehyde for 12 hours. The capsules were then allowed to settle, separated from the supernatant, and washed three times with fresh deionized water. All steps were carried out under inert gas (N_2 or Ar) to minimize oxidation of the O_2 sensitive dye. A typical core material consisted of canola oil with up to 20 ppm of the oxygen sensitive fluorescent dye, tris(4,7-diphenyl-1,10-phenanthroline) ruthenium(II) bis(hexafluorophosphate) complex, and up to 20 ppm of an inert fluorescent internal standard.

Stability experiments were carried out using approximately 4 g of capsules dispersed in 40 mL of water. One set of microcapsules was maintained under inert atmosphere and used as a control experiment. A second set of microcapsules was agitated at room temperature and exposed to air. 0.2 mL samples were collected periodically and their fluorescence was measured. Fluorescence spectra of the core materials were collected with a Perkin Elmer LS50B Luminescence Spectrometer. Fluorescence of the microcapsule samples was monitored with a Beckman Coulter DTX 880 Multimode Detector. The ratio of O_2 sensitive dye and internal standard dye fluorescent signal was monitored.

All microcapsule samples were characterized using Malvern Mastersizer 2000 particle size analysis, Olympus BX60 optical microscopy, and Carl-Zeiss EVO-50EP variable pressure electron microscopy.

RESULTS AND DISCUSSION

The core material formulation was developed to include an internal constant fluorescent signal and an oxygen sensitive fluorescent signal, where both dyes may be excited with the same wavelength and emit at different distinguishable wavelengths. For example, when incorporated into canola oil both dyes are excited at 485 nm and emit at different wavelengths (Figure 1). The oxygen sensitive dye emits at 580 nm, while the internal standard dye emits at 520 nm.

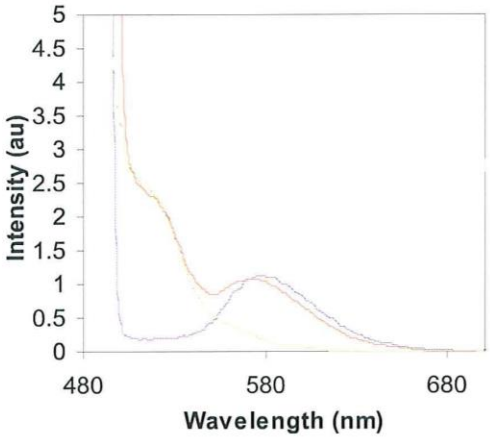

Figure 1. Fluorescent spectra of (blue) oxygen sensitive dye, (green) internal standard dye, and (red) combination of the two dyes in canola oil. Excitation at 485 nm.

When encapsulated, the oxygen sensitive dye and internal standard retain their distinct fluorescent signals. Figure 2 shows results of canola oil/dye filled microcapsules exposed to N_2 and O_2. The fluorescent signal ratio for the two dyes remains relatively constant for the microcapsules stored in N_2. The signal decreases over many days for the microcapsules exposed to air. Efforts are underway to further quantify the oxidation rate and compare the monitoring system to standard GCMS or HPLC methods.

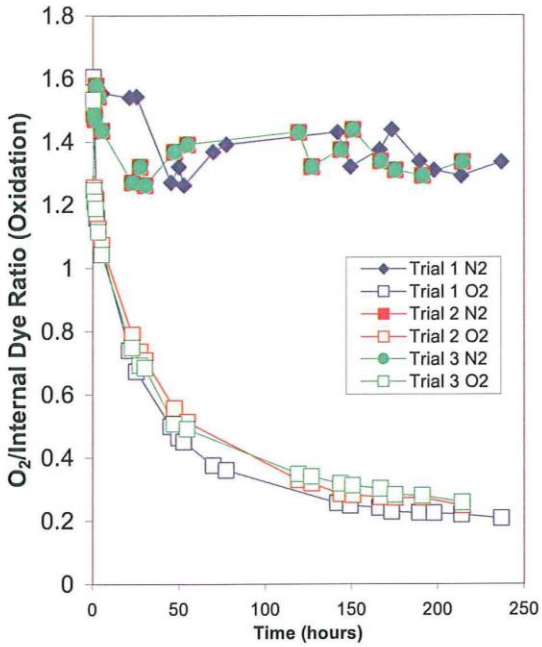

Figure 2. Fluorescent intensity ratio of O_2 dye to internal standard dye over time for microcapsules stored in air (O2) and stored under nitrogen (N2). Capsules were excited at 485 nm and dyes measured at 535 nm and 625 nm for the internal standard and O_2 sensitive dye, respectively.

CONCLUSION

A microcapsule oxidation monitoring system was developed using a fluorescent oxygen sensitive dye and stable internal standard fluorescent dye. Oxidation of the microcapsule core material was monitored with fluorescence spectroscopy without destruction of the microcapsules or extraction of the core material.

REFERENCES

1. Bacon, J. R.; Demas, J. N. *Anal. Chem.* **1987,** 59, (23), 2780-2785.
2. Klimant, I.; Wolfbeis, O. S. *Anal. Chem.* **1995,** 67, (18), 3160-3166.

ACKNOWLDEGEMENTS

Financial support was provided by the Southwest Research Institute (SwRI®) Internal Research and Development Program, and the Advisory Committee for Research.

Appendix II – Abstract Template *(see CRS website for editable Word Document)*

Abstract Title Centered and Bold in Upper- and Lowercase

A. Author[1], B. Author[2], and C. Author[1]

[1]Institution, City, State or Province, Zip/Postal Code, Country; [2]Institution, City, State or Province, Zip/Postal Code, Country
presenting author email address

ABSTRACT SUMMARY

The format of the abstract is illustrated in this template, designed for the preparation of your abstract. This text is for demonstration only.

Replace the sample title, author listing, author affiliations, designated presenting author's email address, and abstract text in this template with your information. The CRS Program Committee recommends that the designated presenting author also be the corresponding author.

Carefully read the instructions and view the Model Abstract before preparing and submitting your abstract.

INTRODUCTION

Abstracts must be submitted via the Internet. Abstracts will be accepted mid-November 2014 – January 15, 2015 (11:59 p.m. U.S. Central Standard Time). No other forms of submission will be accepted. A link to the online submission form is available on the CRS meeting website. Use Internet Explorer as your browser. Be sure to turn off your browser's pop-up blocker.

EXPERIMENTAL METHODS

The abstract heading spans both columns and must contain the abstract title, names and affiliations of all authors, and email address of the designated presenting author. The CRS Program Committee recommends that the designated presenting and the corresponding author be one and the same. Please note that you must repeat this information in the submission form. Author names that are not included in the submission form will not appear in the program guide.

RESULTS AND DISCUSSION

The abstract body is in two-column format and must include the following subjects: Abstract Summary, Introduction, Experimental Methods, Results and Discussion, Conclusion, and References. The abstract must include data and tables and/or figures (clearly presented) to support the data. Acknowledgments are optional but recommended.

CONCLUSION

When the abstract is complete and accurate (please proof carefully), convert the abstract to .pdf and save it to a local drive. Only .pdf files will be accepted.

Upload the pdf formatted abstract from your local drive. Submitted abstracts may be uploaded and revised by the submitter during the submission period of mid-November 2014 – January 15, 2015 (11:59 U.S. Central Standard Time). Acknowledgment of submission will be emailed to the author designated as the primary contact.

REFERENCES

1. Select "Letter" (8½ × 11 inches [21.59 × 27.94 cm] in Page Setup. Set margins (left and right, top and bottom) to .75 inch (1.91 cm).
2. Accepted font is 10-12 point Arial, Times, Times New Roman, or Helvetica.
3. Title is in bold type and centered across the page.
4. Author names are centered and identified with number superscripts to correspond to author affiliations. Underline the designated presenting author's name.

5. Author affiliations are centered and identified with number superscripts to correspond to the respective author name; include the designated presenting author's email address.
6. Abstract body alignment is justified with the first line of each paragraph indented .25 inch (.63 cm).
7. Abstract body format is two-column (3.25 inches [8.25 cm] per column) with 0.5 inch (1.27 cm) between columns.
8. Include one line of space between the title and the name(s) of the author(s) and between author name(s) and affiliation(s).
9. Include one line of space between sections.
10. Abstract must be 2 pages as demonstrated in the Model Abstract.
11. References must be numbered; there are no lines of space between references.

ACKNOWLEDGMENTS

The criterion for acceptance of presentation at the CRS Annual Meeting and Exposition is based on an anonymous peer-review process. A panel of academic experts will review all abstracts. Only abstracts judged to be of the highest quality and relevance will be accepted. The author must obtain the necessary permissions prior to submission of the abstract. The abstract permission and review procedures are available in the Abstract Submission Guidelines & Procedures document.

The Program Committee reserves the right to evaluate, accept, or reject abstracts that do not meet minimum requirements, as outlined in the Review Procedure and below. The committee may also switch abstracts to any topic category based on their evaluation and organization requirements.

The committee will determine the placement of accepted abstracts for Research Highlight Talk with poster or poster presentation only. Notification of acceptance or rejection of an abstract for presentation will be sent in April to the designated presenting author.

If the abstract is accepted, the designated presenting author must register and pay the fee by May 14, 2015, for the CRS annual meeting, July 26 - 29, 2015, in Edinburgh, Scotland, and must agree to present the abstract at the annual meeting. If the designated presenting author is not registered, the abstract will be withdrawn and will not be included in the program or the online abstract library. Abstracts will be published June 26, 2015.

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Significant and original contribution within the scope of the Controlled Release Society

Abstract submitted by the deadline

Written in clear English

Few syntax/spelling mistakes

Sufficient data presented, adequately analyzed and discussed with appropriate conclusions supported by the data

Meets format guidelines

Contains data and tables and figures, clearly presented, to support the data

The abstract will be read and scored by the CRS Program Review Committee and will be assigned a score based on the following assessment criteria for scientific content.

5 Ground-breaking research of outstanding quality providing a new perspective in a new or emerging field.

4 New research of outstanding quality providing a new perspective in an existing field or new research of high quality in a new or emerging field.

3 New research of high quality providing an enhancement of current understanding in an existing field.

2 Research providing support of current understanding; representing modest or no addition to current understanding in an existing field over and above previously published work; not sufficiently significant and/or original research.

1 Abstract does not comply with minimum submission instructions, is not submitted in the proper format, and/or does not include all required fields. A score of 1 will result in the rejection of an abstract