**Dear editor of J. Serb. Chem. Soc;**

Thank you for giving us the opportunity to revise our manuscript, and thanks the reviewers for their fair review. In response to the reviewers’ comments, the following changes have been made. The corresponding changes are also highlighted in yellow throughout the manuscript.

Reviewer A:

Does the manuscript contain enough significant original material?:
        yes

Is the manuscript clearly and concisely written?:
        yes

Are the conclusions adequately supported by the data?:
        no

Does the manuscript give appropriate credit to related recent publications?:

        yes

Are the references appropriate and free of important omissions?:
        yes

Is the length of the manuscript appropriate?:
        yes

Does the manuscript need condensation or extension?:
        yes

Is the quality of the figures (including legends and axes labelling)
satisfactory?:
        yes

Are the nomenclature and units in accordance with SI?:
        yes

Are the English grammar and syntax satisfactory?:
        no

ADDITIONAL COMMENTS
Please indicate the page numbers for suggested corrections.
Please, be as specific as possible if major correction by the author(s) is
recommended! :
        Please see Report

REPORT:
        REPORT
1. Title is interesting but not appropriate to the subject of the
manuscript.

**Response:** **Title was changed.**2. Abstract must be rewritten with extraction of the main points of
presented work:
 - example:  sentence ''A set of bis- and tris(indolyl)methanes were
prepared and dehydrogenated to their  hyperconjugated products in a one-pot
fashion by using a novel heterogeneous solid acid catalyst  based on
nano-sized –SO3H functionalized mesoporous KIT-6 coated on magnetite
nanoparticles  (Fe3O4@SiO2@KIT-6-OSO3H)" must be rewritten as the catalyst
was used in first step of synthesis, dehydrogenation was performed by using
(NH4)2S2O8, O2, air ...

**Response:** **The abstract was amended accordingly**.

- "The catalyst was fully characterized by spectroscopic and microscopic
techniques as well as nitrogen adsorption-desorption isotherms", definition
of spectroscopic techniques, and what is meaning of microscopic techniques?

**Response: Appropriate characterization techniques were mentioned. For example: “by Fourier transform infrared spectroscopy (FT-IR), transmission electron microscopy (TEM) and X-ray powder diffraction (XRD), …”**- What is meaning "novel heterogeneous solid" in regard to author's previous
publications refs. 24-26. New synthesis or new combination of known
materials in obtained core shell structure?

**Response: The catalyst is of course a new combination of known materials. As I appreciate this comment, the abstract was changed to “Our catalyst as a new combination of known materials,…”**
3. Appropriate characterization of Fe3O4@SiO2@KIT-6-OSO3H catalyst was
presented. It will be useful to present XRD analysis of Fe3O4 before
precipitation of silica. Also quantification of OSO3H, i.e.
volumetric/potentiometric titration should be presented.

**Response: XRD pattern of Fe3O4 was added to the Figure 2. Quantification method for –OSO3H functionality by potentiometric titration was mentioned in the RESULTS AND DISCUSSION section. Corresponding instrumental details were also included in the EXPERIMENTAL section.**

4. Author claim: "As shown in Figure 5, initially, in the visible range of
π\* transitions was◊spectrum no considerable absorption attributable to n
observed and the solution was  almost colorless. Upon oxidation however,
π\* transitions were red-shifted to the visible range due to◊n
hyperconjugation and lowering the π\* level. The same transitions were also
observed when the solution was sparged with air for 30 minutes."
Such statement should be taken with caution, better to use batochromic (red)
of the corresponding maxima as the authors did not present deeper analysis
on the electronic transition. It is related to the similar text on page 9.

**Response: Explicit expressions on molecular orbital transitions were removed. As I appreciate this comment, we will work on this issue in our future studies. “Bathochromic shift” expression was used instead.**
5. Characterization of obtained product 2a-2k is main weakness of the
manuscript.
Are the compounds 1a-2k and 2a-2k knew or known compounds? If knew, detail
characterization should be presented (eventually in Supplementary material).
Only "Selected characterization data for compound 2h" without detail
assignments of appropriate proton shift was given. No data from 13C NMR
spectra.
If the compounds are known authors must provide appropriate references. The
authors should present analysis of the extent of dehydrogenation by using
NMR spectroscopy regarding transformation to vinyl proton/carbon, which
could be useful for explanation of the authors statement about "partial
dehydrogenation" of the compounds in series 1.

**Response: All of the reported products except 2g and 2h are known compounds and their characterization data can be found in previous reports, which are now referenced in EXPERIMENTAL section (References 21, 28). One new reference in this context was included. Full characterization of 2g and 2h was included, trying to assign appropriate proton shifts, the whole characterization data was transferred to SUPPLEMENTRAY MATERIAL. Indoles generally show two doublets and two triplets with the coupling constants of about 8.0 Hz due to the aromatic ring protons, namely H4, H5, H6, H7. Unfortunately, further NMR studies on dehydrogenation in the NMR tube looks impossible at the present time due to quench of our instrument and prolonged queue by other institutions (about 3 months).**
6. The statement "The most intense color change against anions however, was
observed for 1h from colorless to  yellow in presence of 1 eq of CN-.
Indeed, after addition of CN-, the solution turned pink for a moment and
then became yellow which may be due to a hydrogen bonding followed by
deprotonation sequence. This promises 1h as a selective colorimetric
chemosensor for selective sensation of CN- in solution (Figure 6, right)"
could not be confirmed solely by UV spectra presented in Figure 6 (left). Do
author have NMR spectra of the compound treated with cyanide?

**Response: Text was changed accordingly, to eliminate such a perception.**

7. The sentence "As predicted, position of the bands is related to the
electron-releasing or –withdrawing nature of the functional groups and
their position on the ring", must be changed.
The author did not predict or analyzed substituent effect on UV maxima
shift, which mean that authors should define trend of UV maxima shifts
influenced by electronic substituent effects. Author should discuss general
trend of the substituent influences on absorption maxima shift.
What about color of both series 1a-2k and 2a-2k if they absorption at
wavelength > 400 nm?

**Response: General trend of the substituent effect on the bands were discussed and the sentence** "As predicted, position of the bands is related to the electron-releasing or –withdrawing nature of the functional groups and their position on the ring", **was changed**.

In general manuscript contain appropriate quality for the acceptance after
suggested corrections.

In my opinion, this manuscript should:
        be published after major revision and additional review

If manuscript is suitable for publishing, referees recommendation :
        Original scientific paper

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Reviewer B:

Does the manuscript contain enough significant original material?:
        yes

Is the manuscript clearly and concisely written?:
        yes

Are the conclusions adequately supported by the data?:
        yes

Does the manuscript give appropriate credit to related recent publications?:

        yes

Are the references appropriate and free of important omissions?:
        yes

Is the length of the manuscript appropriate?:
        yes

Does the manuscript need condensation or extension?:
        yes

Is the quality of the figures (including legends and axes labelling)
satisfactory?:
        yes

Are the nomenclature and units in accordance with SI?:
        yes

Are the English grammar and syntax satisfactory?:
        yes

ADDITIONAL COMMENTS
Please indicate the page numbers for suggested corrections.
Please, be as specific as possible if major correction by the author(s) is
recommended! :
        (line 147), check sentence starting with O2, although….

**Response: The sentence was corrected. (page 8)**

REPORT:
        This study deals with preparation and properties of bis- and
tris(indolyl)methanes in the presence of heterocatalyst, based on Fe3O4
nanoparticles coated with –SO3H modified mesoporous silica KIT-6.
Interesting results are presented and the contribution is recommended for
publication.
However, there are certain points that should be clarified in the text.
Authors are well published in the field of indole-type molecules. For this
reason, it would be useful to give a brief outline of their former work (not
only to refer to it), in particular on mesoporous silica MCM41. Indicate
what motivated them to pass from MCM41-to KIT-6; the same methodology was
used for the preparation and characterization of catalysts. Moreover, (Table
2) experimental data, acquired using catalysts (I suppose based on their
previous results) Fe3O4@MCM-41-OSO3H, Fe3O4@MCM-48-OSO3H and Fe3O4@SiO2
@KIT-6-OSO3H (current study) are compared, but not sufficient explanation is
given.

**Response: We tried to do the best on this comment and corresponding changes were made to the INTRODUCTION and RESULTS AND DISCUSSION section, along with rearrangement of the references. (page 2).**
To facilitate the comprehension of the elaborated topic (core-shell
structured catalyst etc.), the first paragraph in Results and Discussion is
suggested to be shifted to Introduction, similar to the approach adopted in
Ref. 26. Please, present the advantage of –SO3H functionalization.

**Response: The mentioned paragraph was shifted accordingly. (page 2).**

There are a few other comments to be considered:

1.        Fig. 1: FT-IR image. To monitor evolution of the surface it would be
meaningful to compare the catalyst before and after – SO3H
functionalisation, or also present spectra of bare and magnetite after KIT-6
modification, if possible. Sole spectrum of the final catalyst is not much
illustrative.

**Response: As I appreciate this comment, FTIR spectra of KIT-6 and Fe3O4@SiO2@KIT-6** **were added to the Figure 1 for comparison. (page 5).**
 change to italic, adjust decimal pointsθ2.        Line 101: 2

**Response: *2θ*** **was italicized and decimal points were adjusted**. (page 6).
3.        Lines 119, 122 and Table 1 should be named more suitably, instead of
physico-chemical properties: i.e. porous properties or textural properties.
It would be appropriate to introduce the data on KIT-6, if possible.
Otherwise, Table can be omitted and data presented in text.

**Response: “physico-chemical properties” was changed to textural properties, Table 1 was omitted and the data presented in the text. Remaining Tables were re-numbered. (page 6).**
4.        Something is not correct with the sentence (line 147), starting with O2,
although….

**Response: The sentence was corrected. (page 8).**
5.        Page 4, Fig. 2. Discussion on low angle XRD is not clear enough; please,
reorganize text and specify the curves. Also, indicate which materials
posses Ia3d symmetry. Besides, nowhere in the text is stated that KIT-6 is
(mesoporous) silica. Should not we expect greater similarities between pure
KIT-6 and catalyst with KIT-6 shell? TEM pictures show rather thick shell.

**Response: Text was changed accordingly and the amendments were made to the INTRODUCTION and RESULTS AND DISCUSSION. (page 6).**

In my opinion, this manuscript should:
        be published after minor revision without additional review
If manuscript is suitable for publishing, referees recommendation :
        Original scientific paper

After all, we look forward to your positive response.

Sincerely yours

A. Khorshidi