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Correction: Electro-organic synthesis: an environmentally benign alternative for heterocycle synthesis

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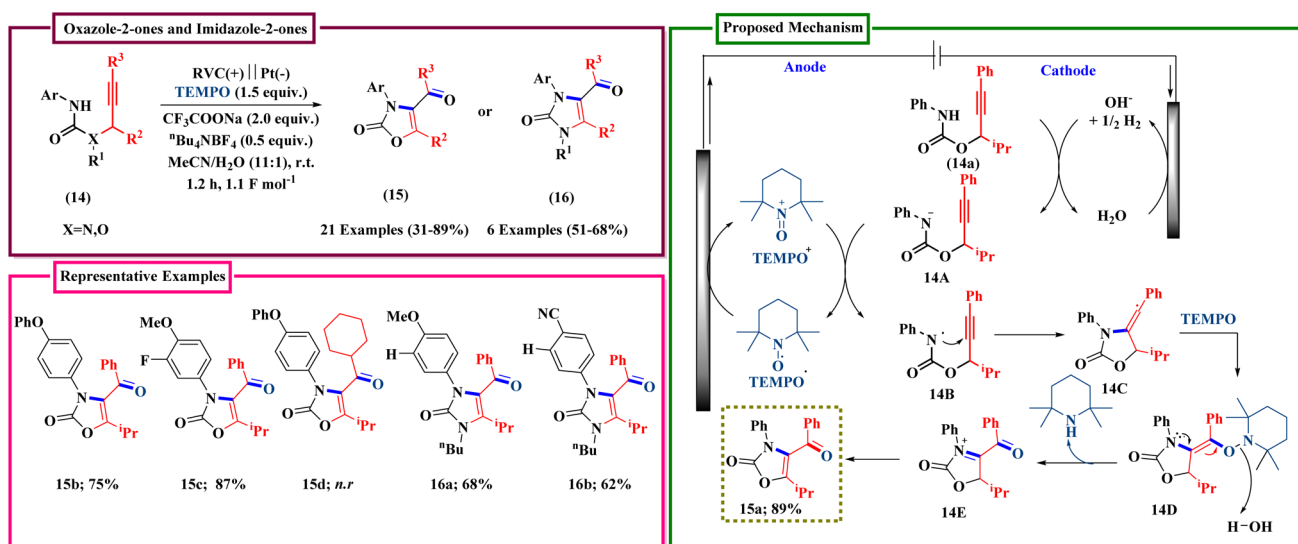
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Correction for 'Electro-organic synthesis: an environmentally benign alternative for heterocycle synthesis' by Suman Devi, *et al.*, *Org. Biomol. Chem.*, 2022, **20**, 5163–5229.

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The authors regret that there were a number of errors throughout their review. These are detailed below.

The structure of **15a** was incorrect in Scheme 6. The correct scheme is shown below.



Scheme 6 Synthesis of oxazol-2-ones and imidazole-2-one using carbamate as substrate.

In the description of the work shown in Scheme 9, the sentence 'The reaction was carried out in a continuous flow system furnished with a Pt rod as an anode and graphite as cathode.', should be corrected to 'The reaction was carried out in a continuous flow system furnished with a Pt rod as the cathode and graphite as the anode.'

The notation of anode and cathode was incorrect in Scheme 13. Originally C and Ni were shown as cathode and anode, but in the reaction, they are working as anode and cathode, respectively. The correct scheme is shown below.

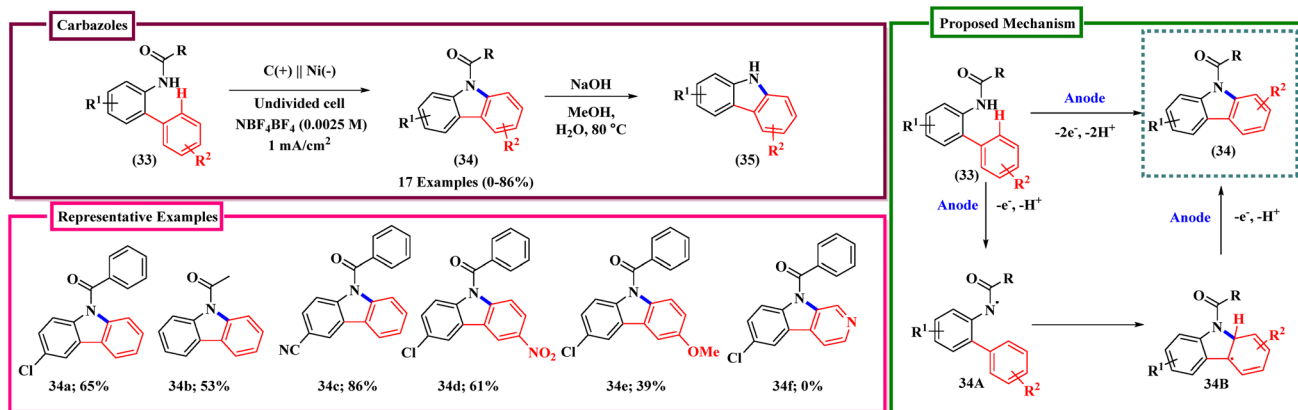
There were errors in structures **41A** and **41B** in Scheme 15. The correct scheme is shown below.

A double bond has been erroneously included in the aziridine ring in all the structures in Scheme 16. The correct scheme is shown below.

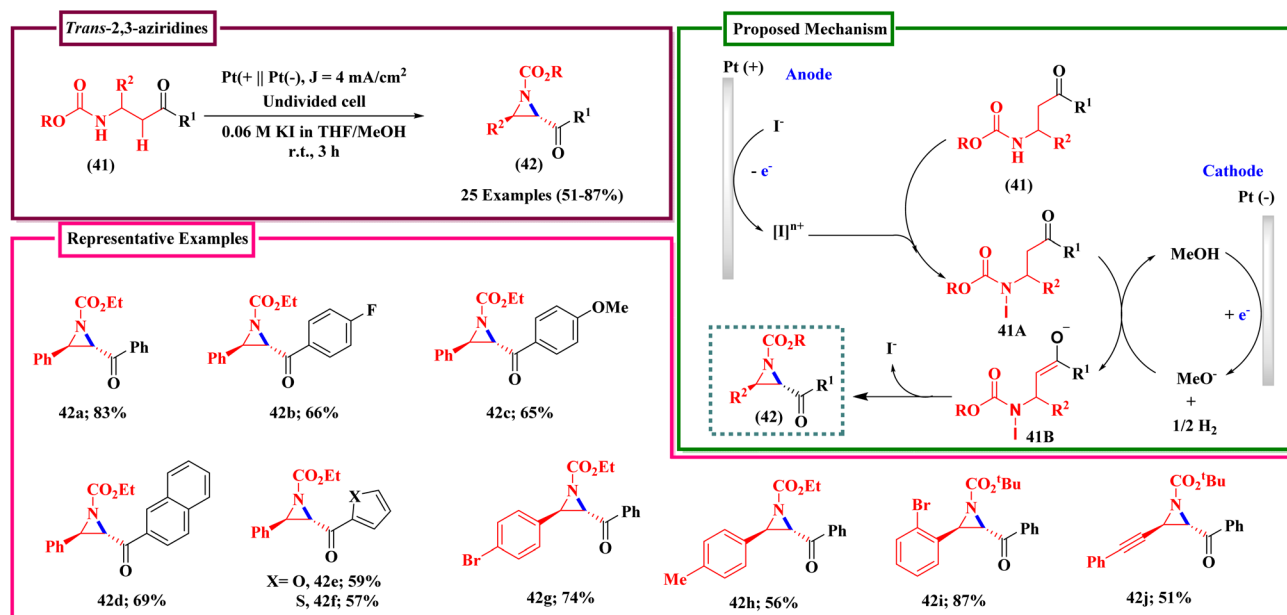
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Scheme 13 Synthesis of carbazoles using 2-(4-methylbenz)amido-5-chlorobiphenyl.



Scheme 15 Synthesis of trans-2,3-aziridines.

The notation of the anode and cathode was incorrect in Scheme 20. Originally RVC and Pt were shown as cathode and anode, but in the reaction, they are working as the anode and cathode, respectively. The correct scheme is shown below.

In Scheme 26 a double bond in the triazole rings was missing. The correct scheme is shown below.

In Scheme 31 $\text{CF}_3\text{SO}_2\text{Na}$ was incorrectly given as $\text{CF}_3\text{SO}_3\text{Na}$. The correct scheme is shown below.

In the description of the work shown in Scheme 32, the sentence 'The reaction was performed in an undivided cell composed of Pt as cathode and carbon as an anode.', should be corrected to 'The reaction was performed in an undivided cell composed of Pt as the anode and carbon as the cathode.'. In addition, there were errors in the structures of intermediates **90C** and **90D** in Scheme 32. The correct scheme is shown below.

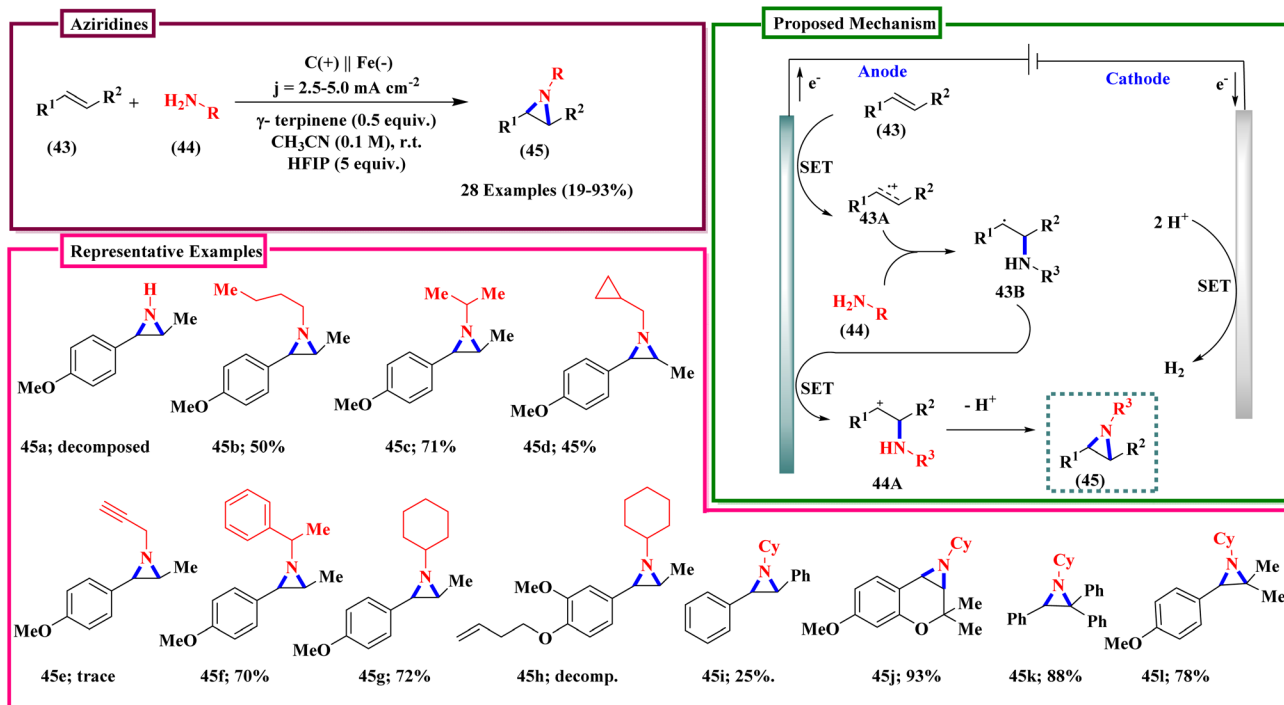
In Scheme 34, the intermediates **27** and **27A** were incorrectly placed. The correct scheme is shown below.

There was an error in the structure of intermediate **102B** in Scheme 37. The correct scheme is shown below.

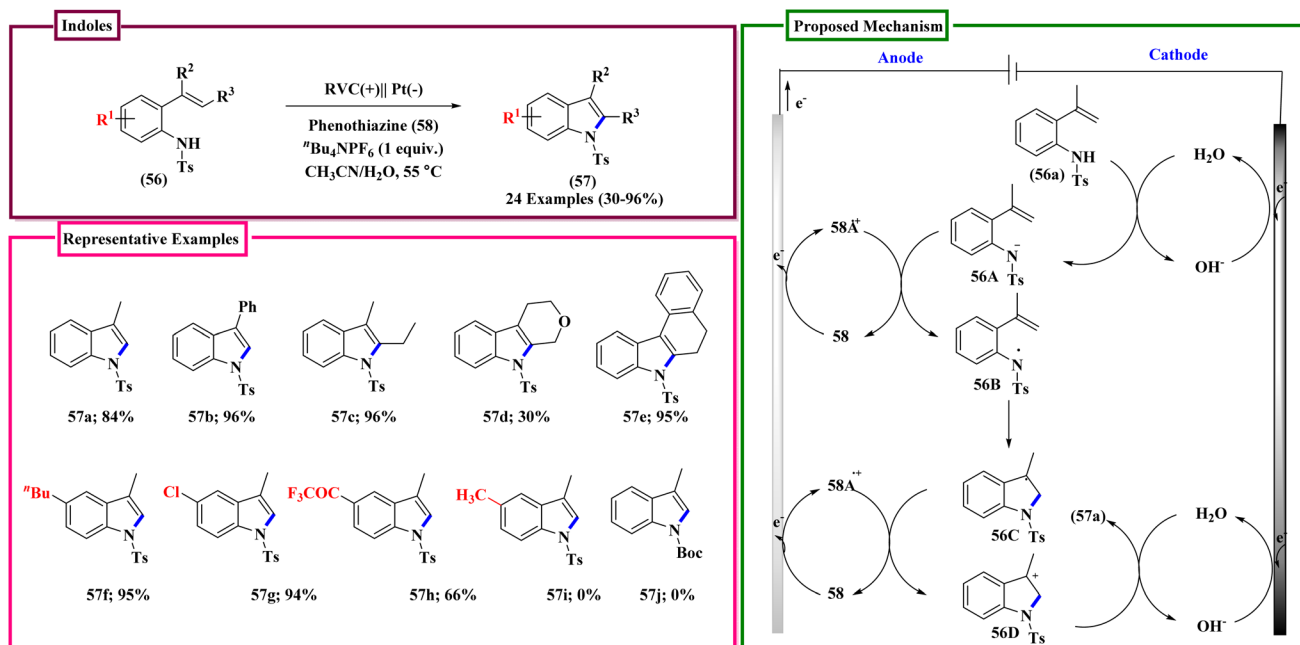
The notation of anode and cathode was incorrect in Scheme 43. Originally C and Pt were shown as the cathode and anode, but in the reaction, they are working as the anode and cathode, respectively. The correct scheme is shown below.

In the description of the work shown in Scheme 44, the sentence 'The reaction was carried out in an undivided cell equipped with a Pt plate as anode and a carbon plate as cathode.', should be corrected to 'The reaction was carried out in an undivided cell equipped with a Pt plate as the cathode and a carbon plate as the anode.'. In addition, in Scheme 44 $\text{CF}_3\text{SO}_2\text{Na}$ was incorrectly given as $\text{CF}_3\text{SO}_3\text{Na}$. The correct scheme is shown below.





Scheme 16 Synthesis of aziridines via oxidative coupling between alkenes and primary alkyl amines.



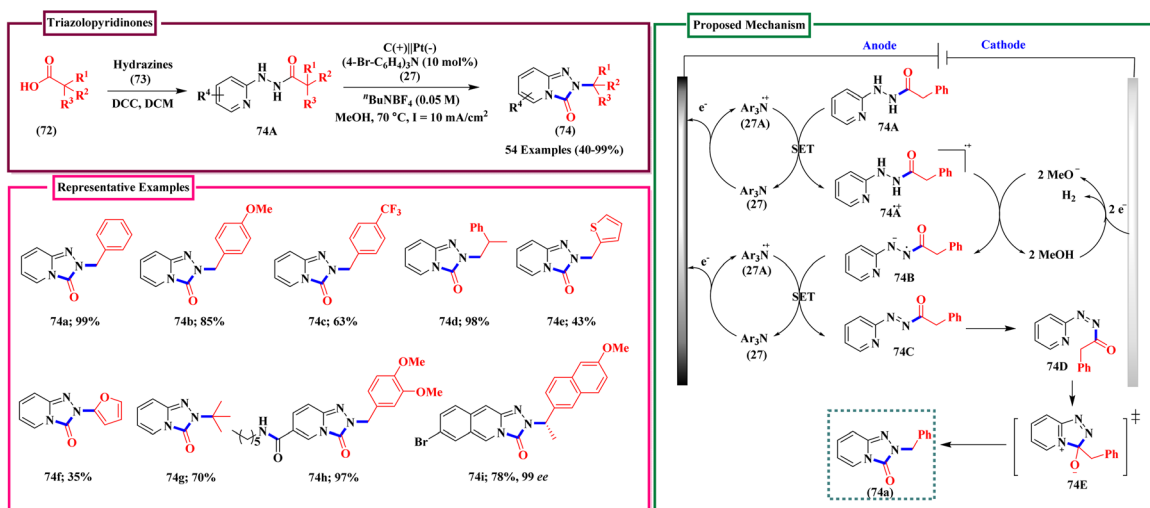
Scheme 20 Synthesis of indoles.

There were some charge related errors in Scheme 45. The correct scheme is shown below.

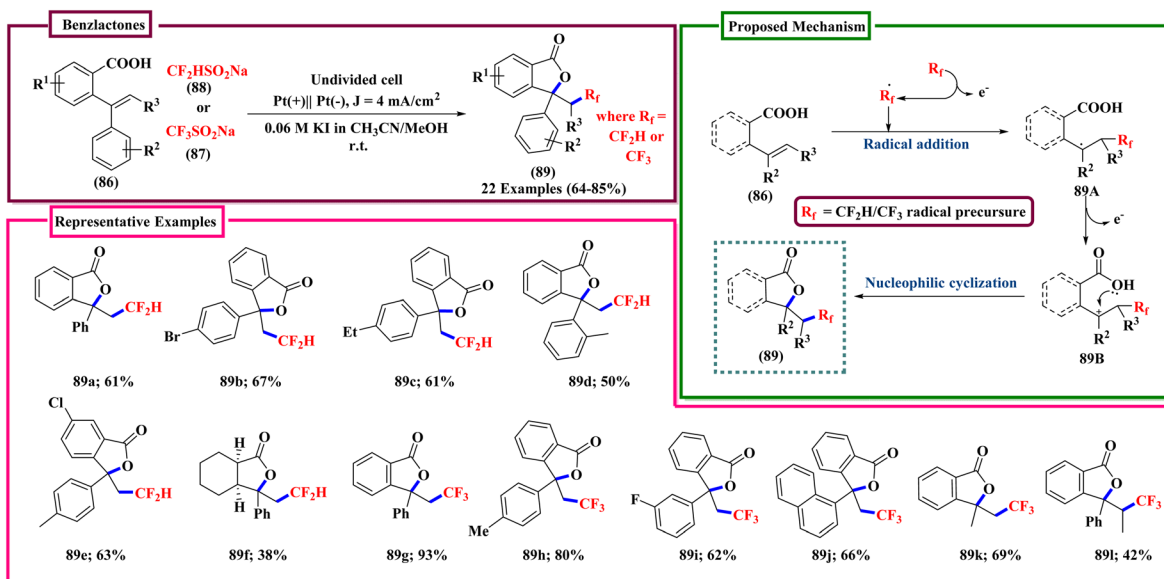
The structure of compound 162 was incorrect in Scheme 56. The correct scheme is shown below.

In the description of the work shown in Scheme 61, the sentence 'The reaction was attempted in an undivided cell fitted with platinum as an cathode and graphite as an anode.', should be corrected to 'The reaction was attempted in an undivided cell fitted with platinum as the cathode and graphite as the cathode.'

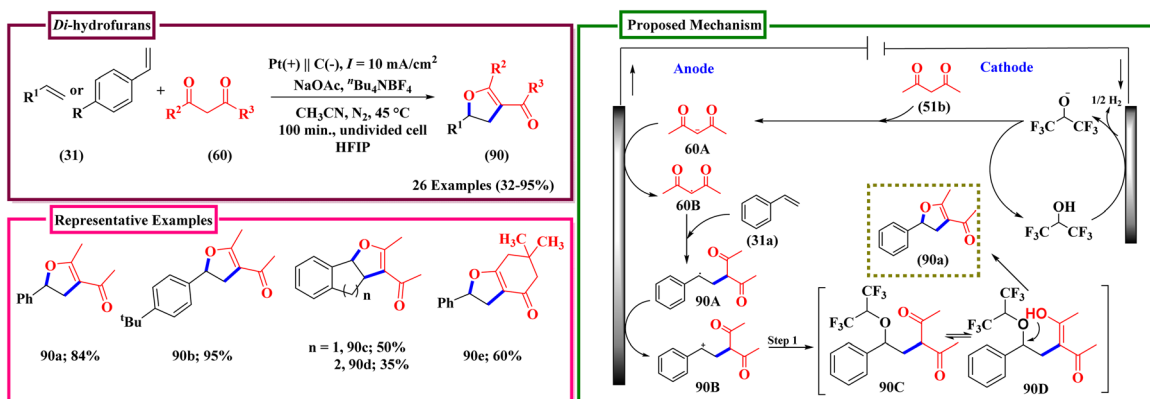




Scheme 26 Synthesis of highly hindered triazolopyridinone by enantiospecific electrochemical rearrangement.

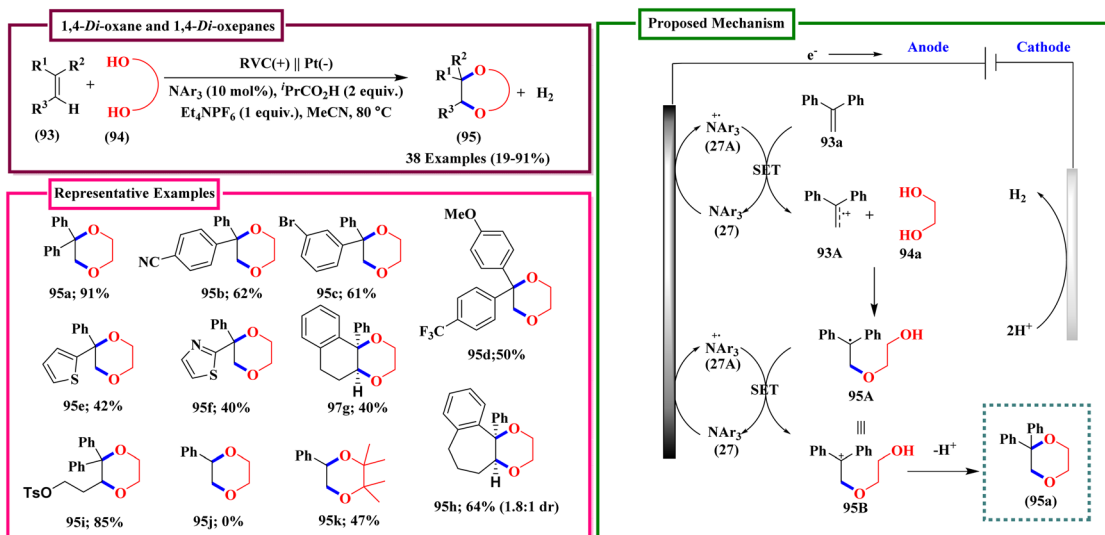


Scheme 31 Synthesis of benzlactones.

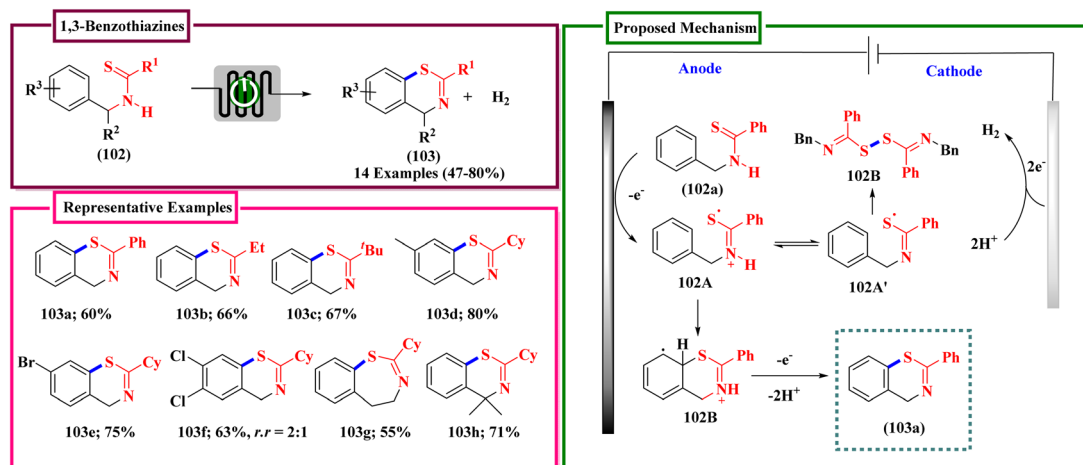
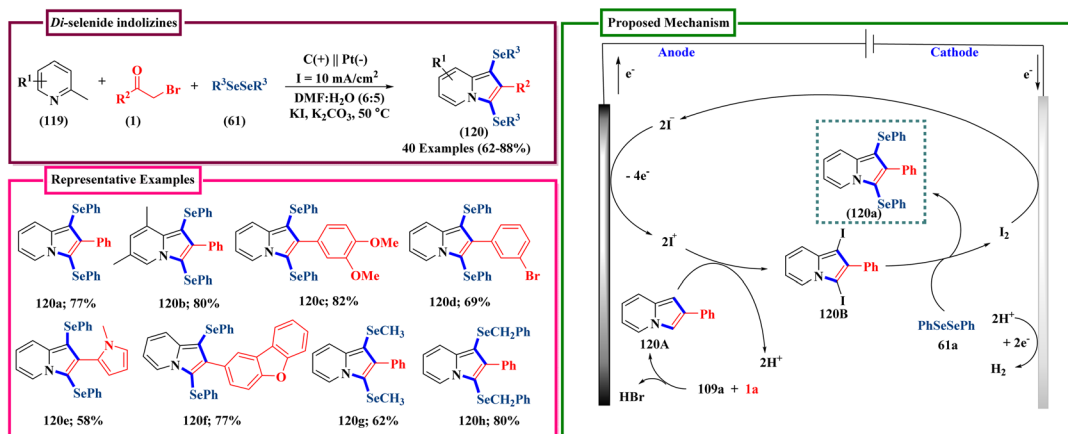


Scheme 32 Synthesis of di-hydrofurans using 1,3-di-carbonyls and alkene as coupling partner.



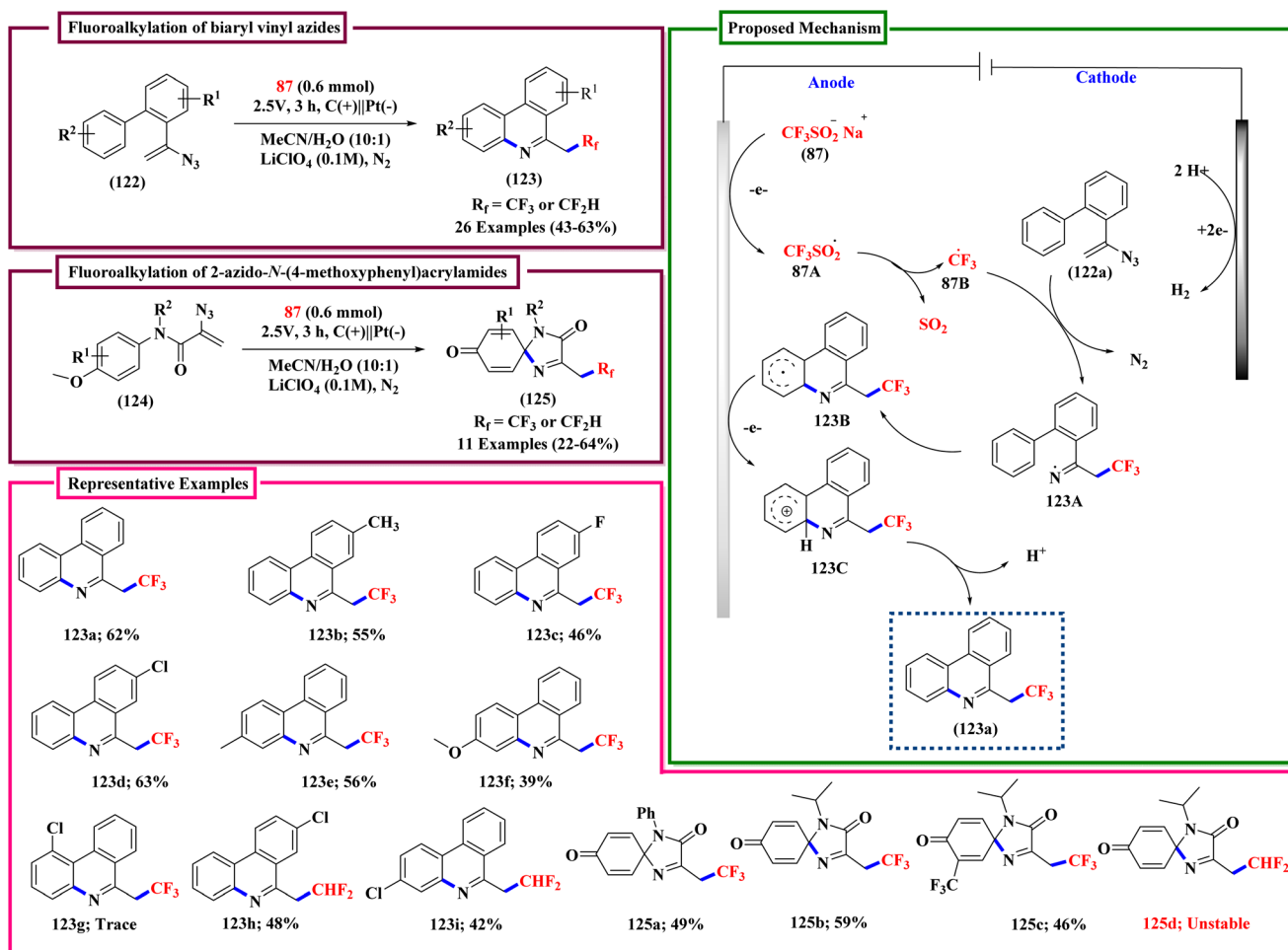


Scheme 34 Synthesis of saturated oxygen-containing heterocycles using alkene with diols.

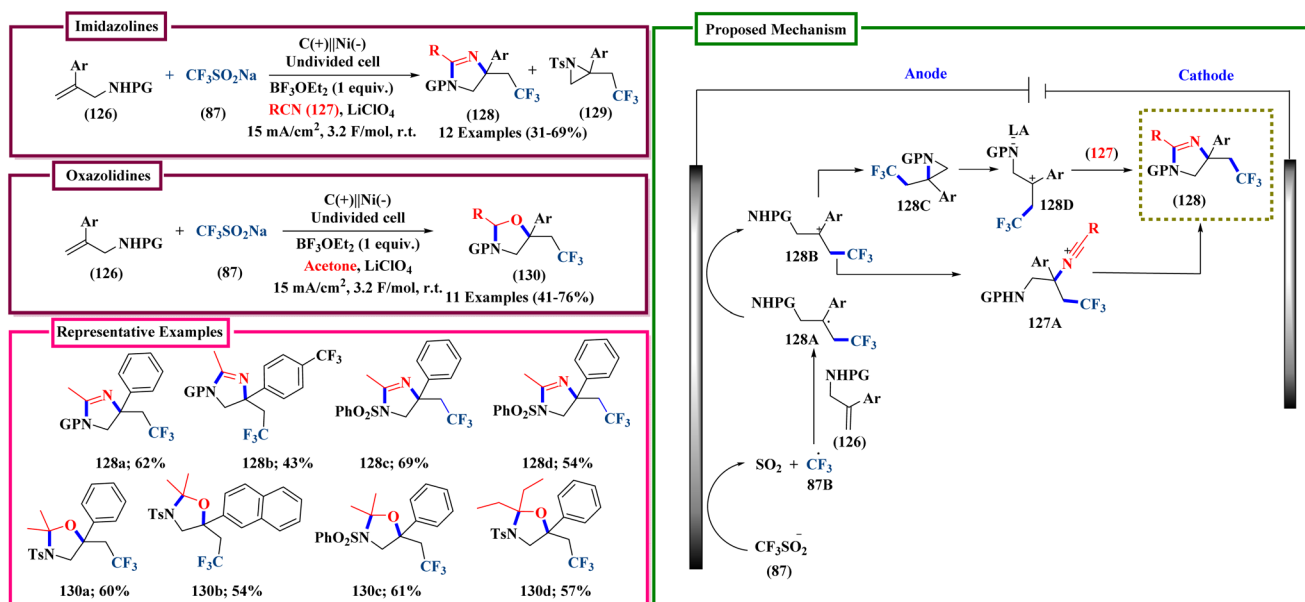
Scheme 37 Synthesis of 1,3-benzothiazines using *N*-aryl thioamides.

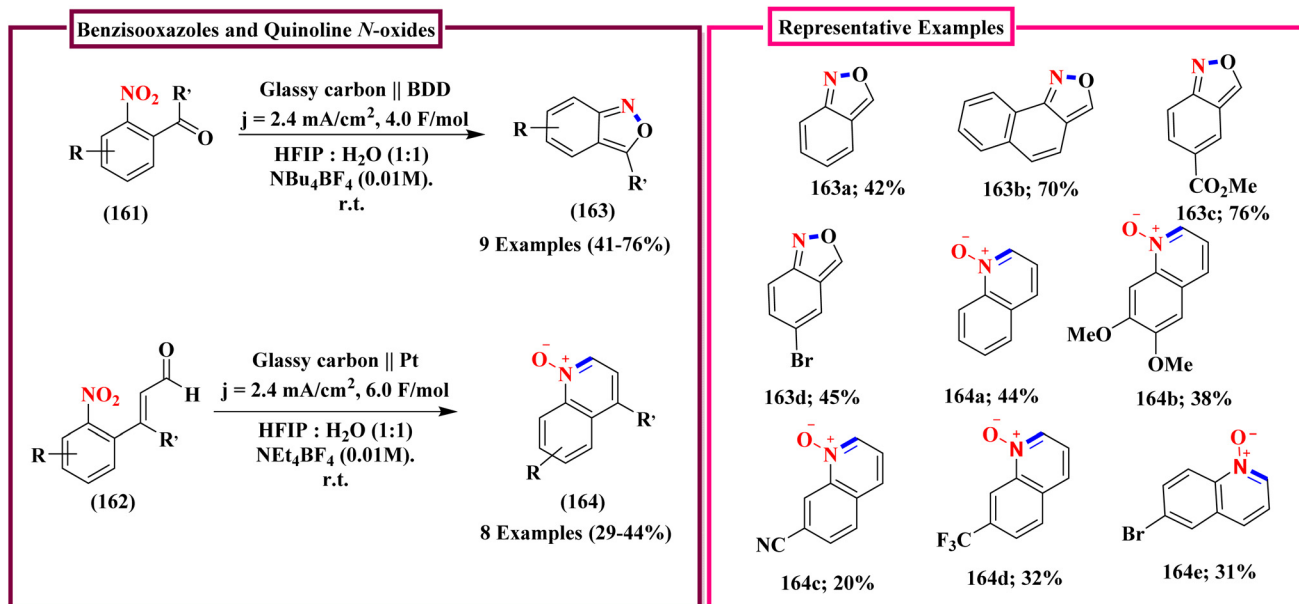
Scheme 43 Synthesis of di-selenylated indolizine using 2-methylpyridine, diphenyl-diselenides and 2-bromoacetophenone.





Scheme 44 Synthesis of 6-trifluoroethyl phenanthridines and quinoline derivatives via fluorination and cyclization of vinyl azides.

Scheme 45 Synthesis of CF_3 containing imidazolines/oxazolidines using *N*-tosyl allylamine and acetonitrile.

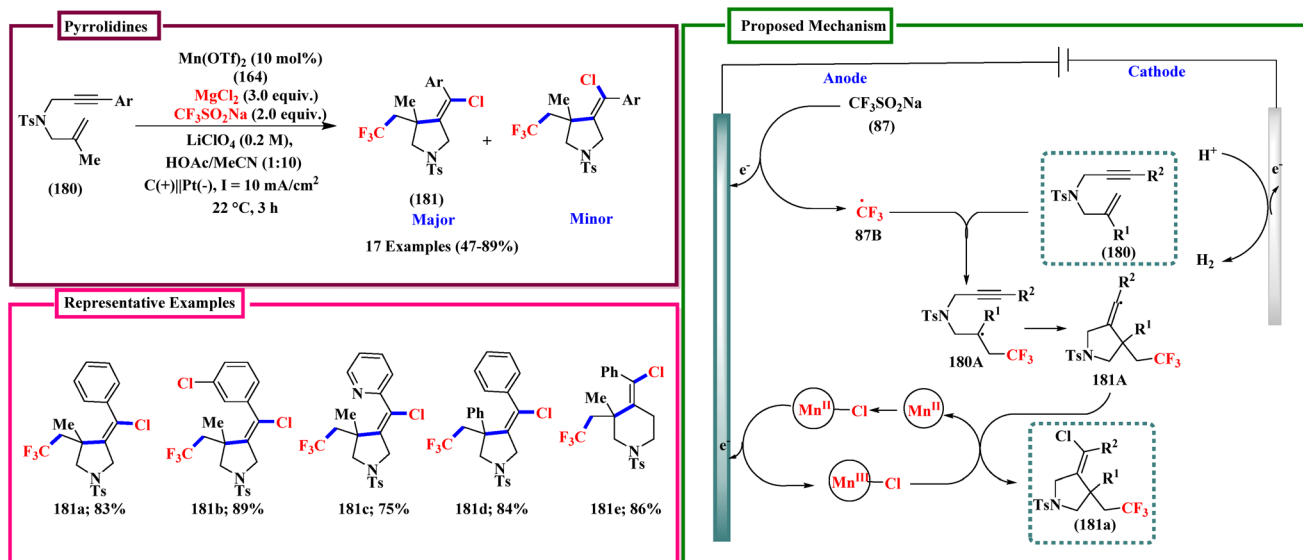


Scheme 56 Synthesis of benzisoxazole and quinoline *N*-oxides using 2-nitrobenzaldehyde.

In Schemes 64 and 65 $\text{CF}_3\text{SO}_2\text{Na}$ was incorrectly given as $\text{CF}_3\text{SO}_3\text{Na}$. The correct schemes are shown below.

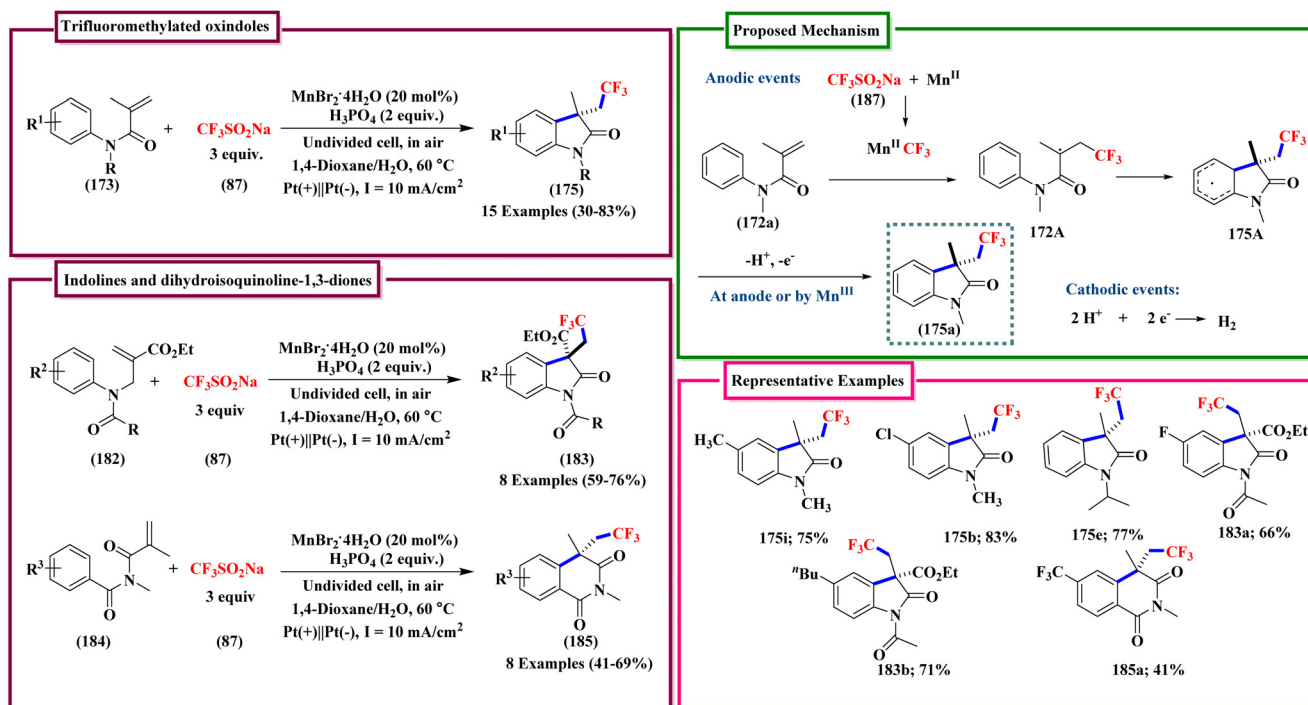
In the description of the work shown in Scheme 66, the sentence 'The reaction was attempted in an undivided cell fitted with aluminium plate as cathode and nickel as anode.', should be corrected to 'The reaction was attempted in an undivided cell fitted with an aluminium plate as the anode and nickel foam as the cathode.'. The sentence 'The reaction did not yield the desired product when Zn was used as cathode.', should be corrected to 'The reaction did not yield the desired product when Zn was used as the anode.'. In addition, the structure of intermediate **186a** in Scheme 66 was incorrect. The correct scheme is shown below.

In the first sentence describing the work shown in Scheme 67, the work was attributed to the incorrect author and the incorrect reference was cited. The sentence 'S. Ben Salah *et al.*¹⁴² reported the iron-catalysed oxidant-free electrochemical synthesis of quinazolinone (**189**) and benzimidazolone (**191**) *via in situ* formation of isocyanates. In order to find the efficient reaction conditions, the initial pre-screening of the reaction was attempted using 1,1'-(1,2-phenylene)bis(3-(benzyloxy)urea) (**188a**) as model

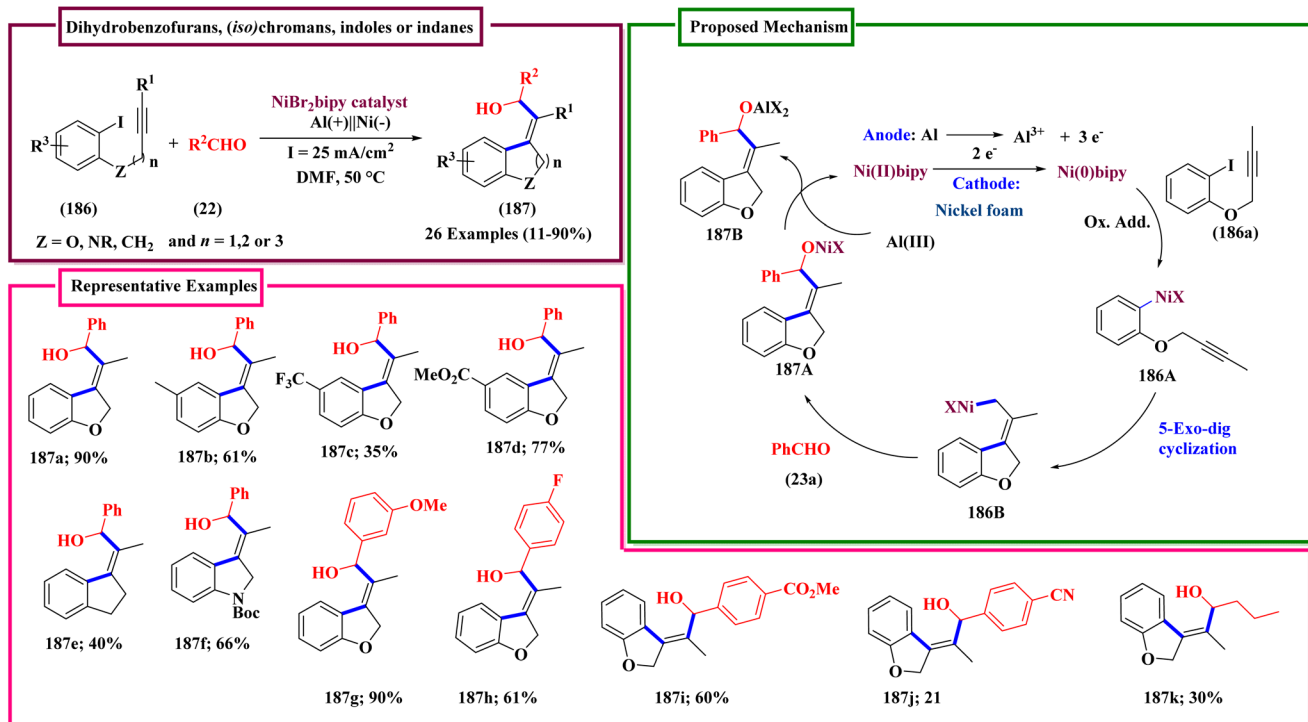


Scheme 64 Manganese-catalysed synthesis of chlorotrifluoromethylated pyrrolidines.





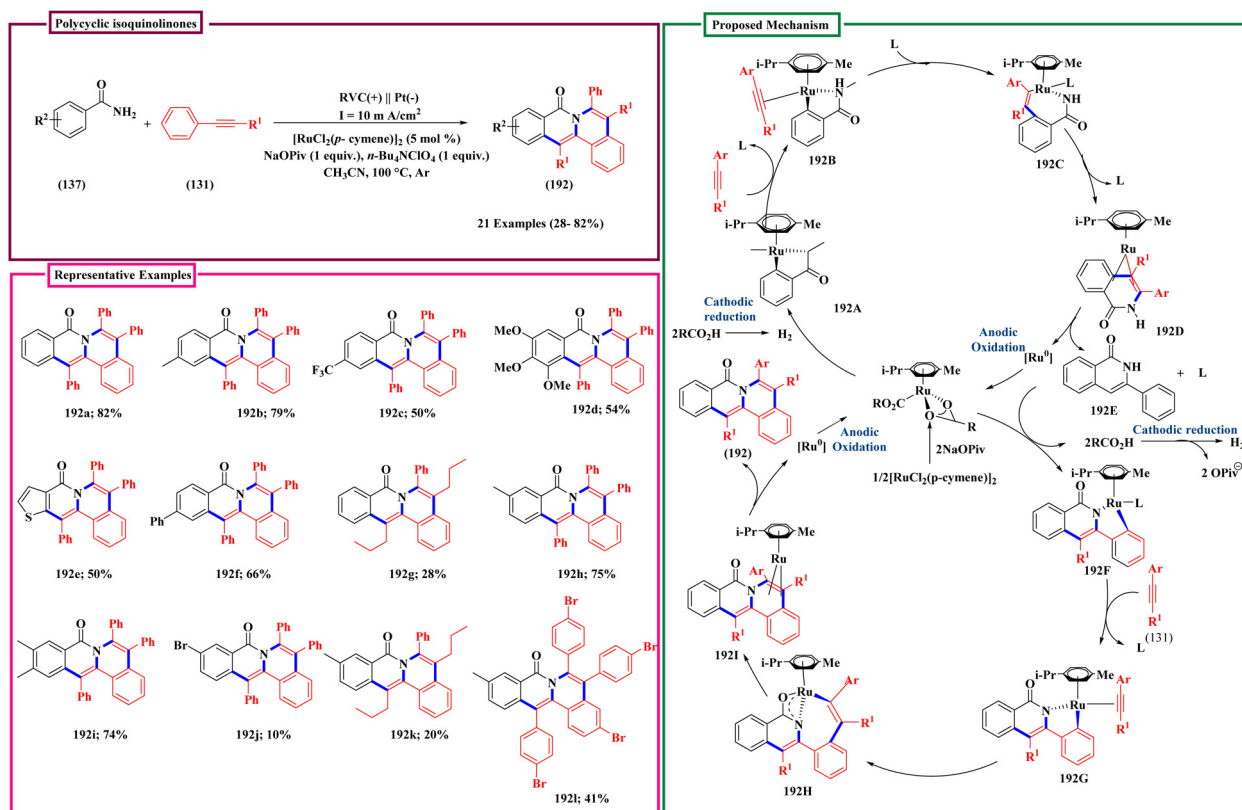
Scheme 65 Manganese-catalysed synthesis of indolines using the Langlois reagent.



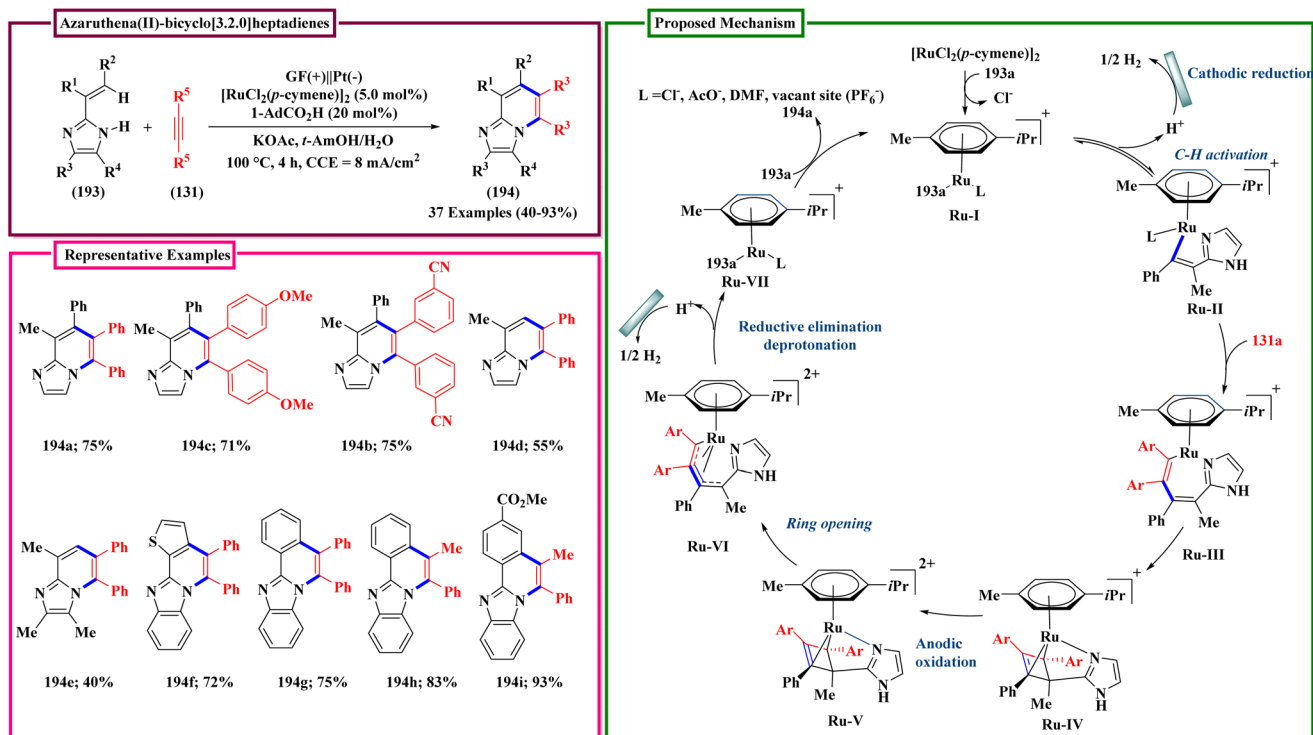
Scheme 66 Nickel-catalysed electrochemical cycloaddition of alkynyl aryl iodide.

substrate'. Should be corrected to 'D. Saha *et al.*³ reported the iron-catalysed oxidant-free electrochemical synthesis of quinazolinone (189) and benzimidazolone (191) *via in situ* formation of isocyanates. In order to find the efficient reaction conditions, the initial pre-screening of the reaction was attempted using 1,1'-(1,2-phenylene)bis(3-(benzyloxy)urea (188a) as the model substrate', where the correct reference is ref. 3 as shown in the reference section below.





Scheme 68 Synthesis of polycyclic isoquinolinones via dehydrogenative cycloaddition of amides and alkynes.



Scheme 69 Ruthenium-catalysed C–H/N–H functionalization of imidazoles.



The notation of anode and cathode was incorrect Scheme 68. Originally RVC and Pt were shown as the cathode and anode, but in the reaction, they are working as the anode and cathode, respectively. The correct scheme is shown below.

In Scheme 69 a double bond was missing in the imidazole ring and also in the structures Ru-IV and Ru-V. The correct scheme is shown below.

References 112, 138, 142 and 146 were incorrect. The correct references are shown below as ref. 1–4 respectively.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

References

- 1 C. Huang and H. C. Xu, *Sci. China: Chem.*, 2019, **62**, 1501–1503.
- 2 C. Huang, X. Y. Qian and H. C. Xu, *Angew. Chem., Int. Ed.*, 2019, **58**, 6650–6653.
- 3 D. Saha, I. M. Taily, S. Naik and P. Banerjee, *Chem. Commun.*, 2021, **57**, 631–634.
- 4 X. Yi and X. Hu, *Angew. Chem., Int. Ed.*, 2019, **58**, 4700–4704.

