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Supporting information

Formation of hydridocobalt(III) phthalocyanine by reaction of cobalt(II) phthalocyanines with sodium borohydride and its reactions with antioxidant isoflavones

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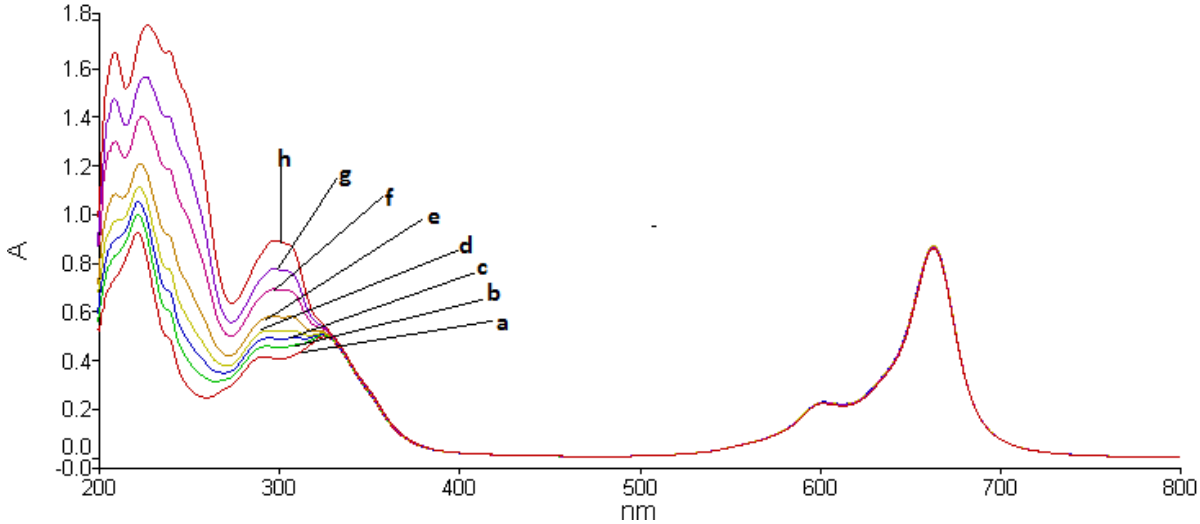

Fig. 6: UV-vis spectra of *tert*.butyl-Co(II)Pc (**4d**) (a), *tert*.butyl-Co(II)Pc(**4d**) on addition of 7-hydroxy isoflavone (**1d**) in methanol (b-

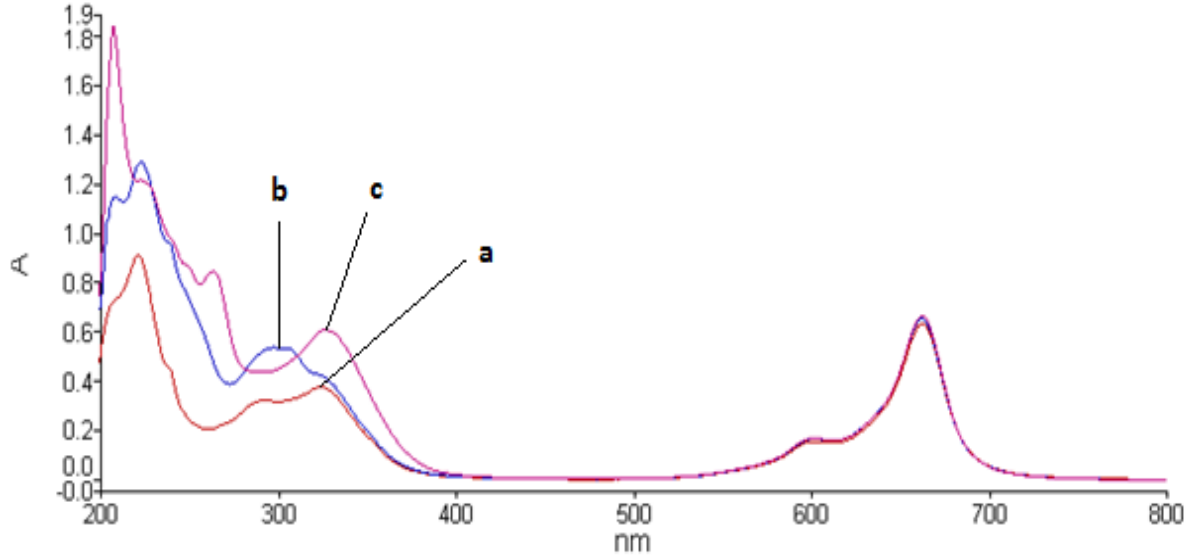

Fig. 7: UV-vis spectra of *tert*.butyl-Co(II)Pc(**4d**) in methanol (a),on addition of 7-hydroxyisoflavone (**1d**) (b), followed by addition of sodium borohydride (c) in methanol.

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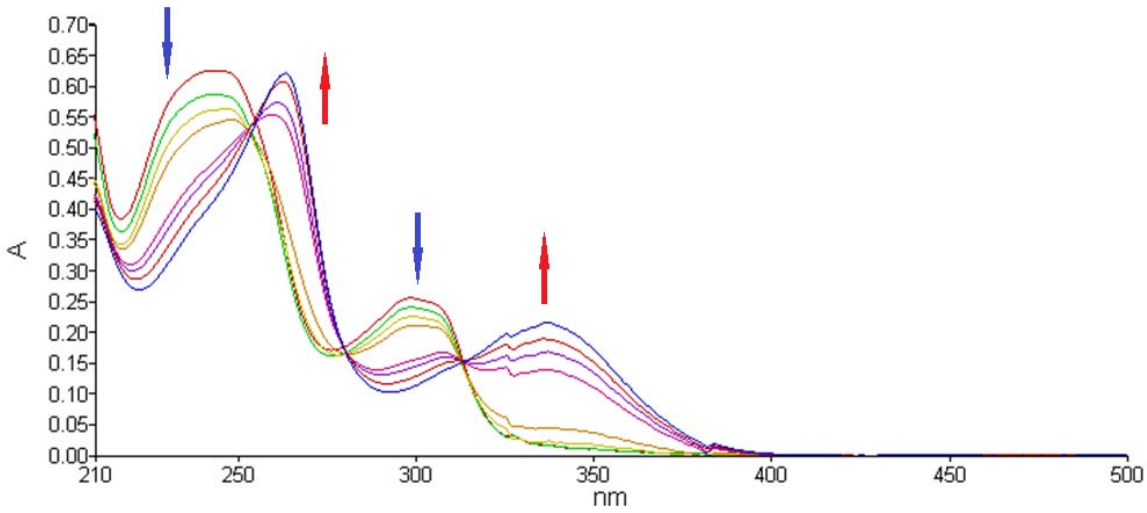

Fig. 8: UV-vis spectra of 7-hydroxyisoflavone (**1d)** on addition of NaOH in methanol.

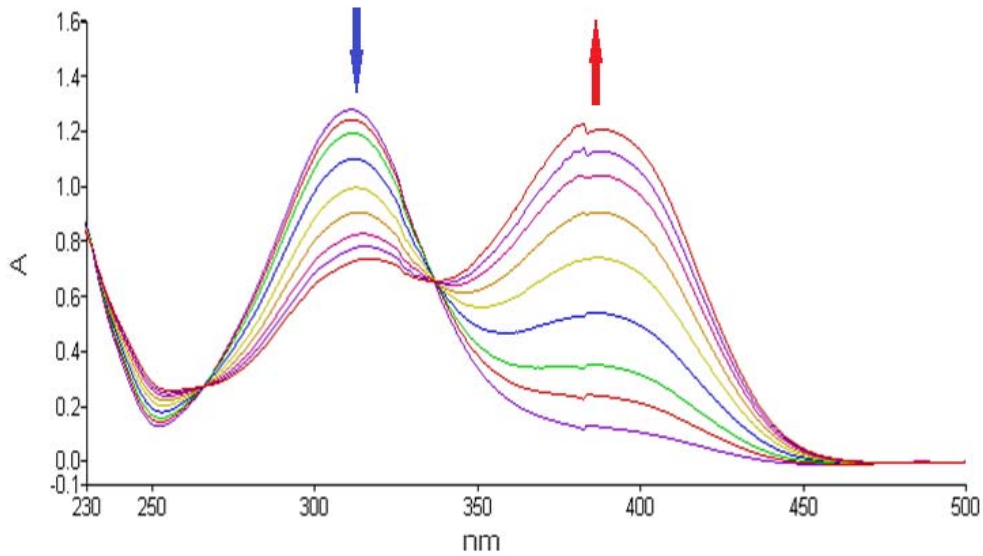

Figure 9: UV-vis spectra of *p*-nitrophenol with the addition of $NaBH_4$ in methanol.

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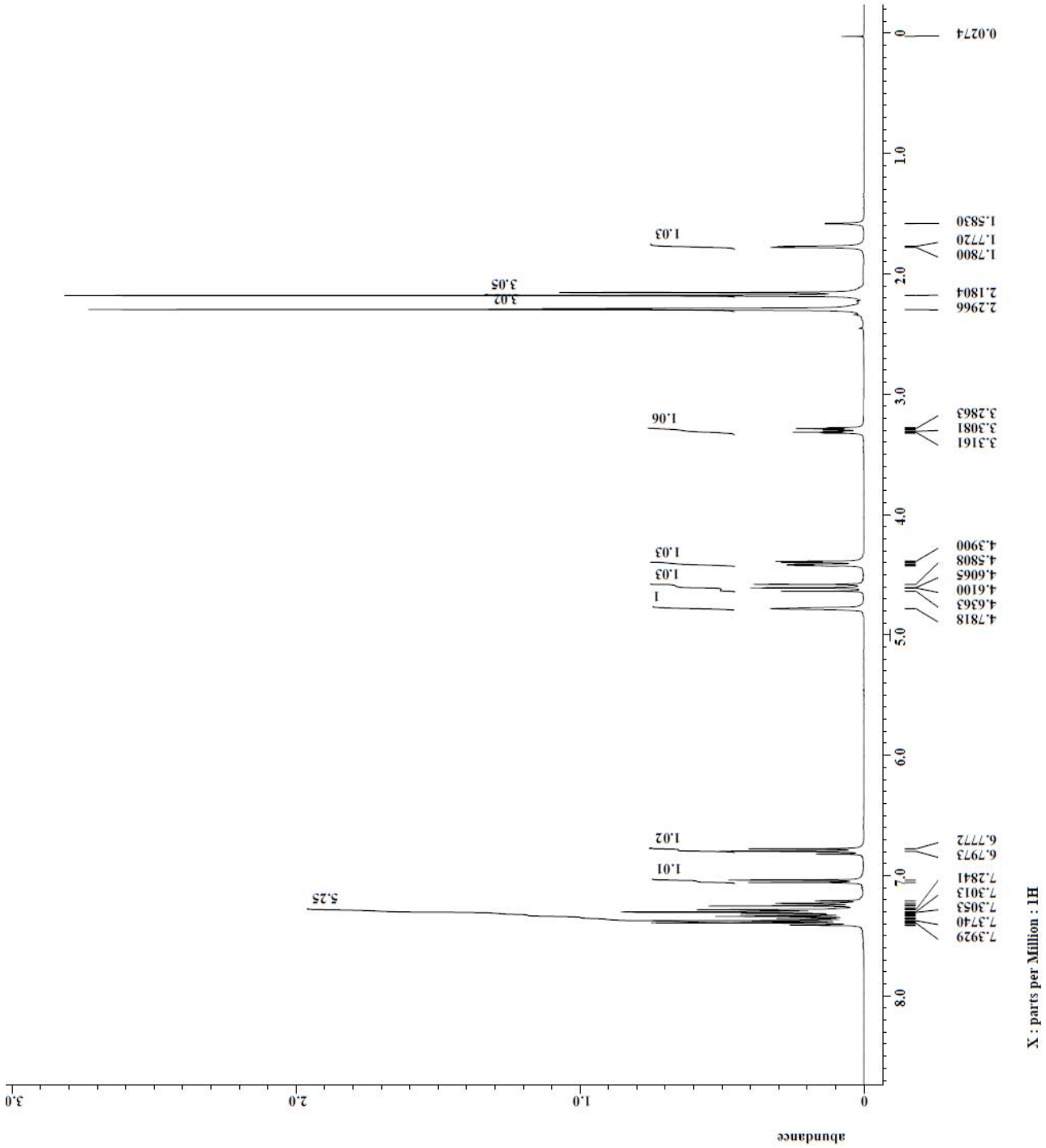

Fig.10: ^{1}H-NMR spectra of *cis-7,8-Dimethyisoflavan-4-ol* (**2c**)

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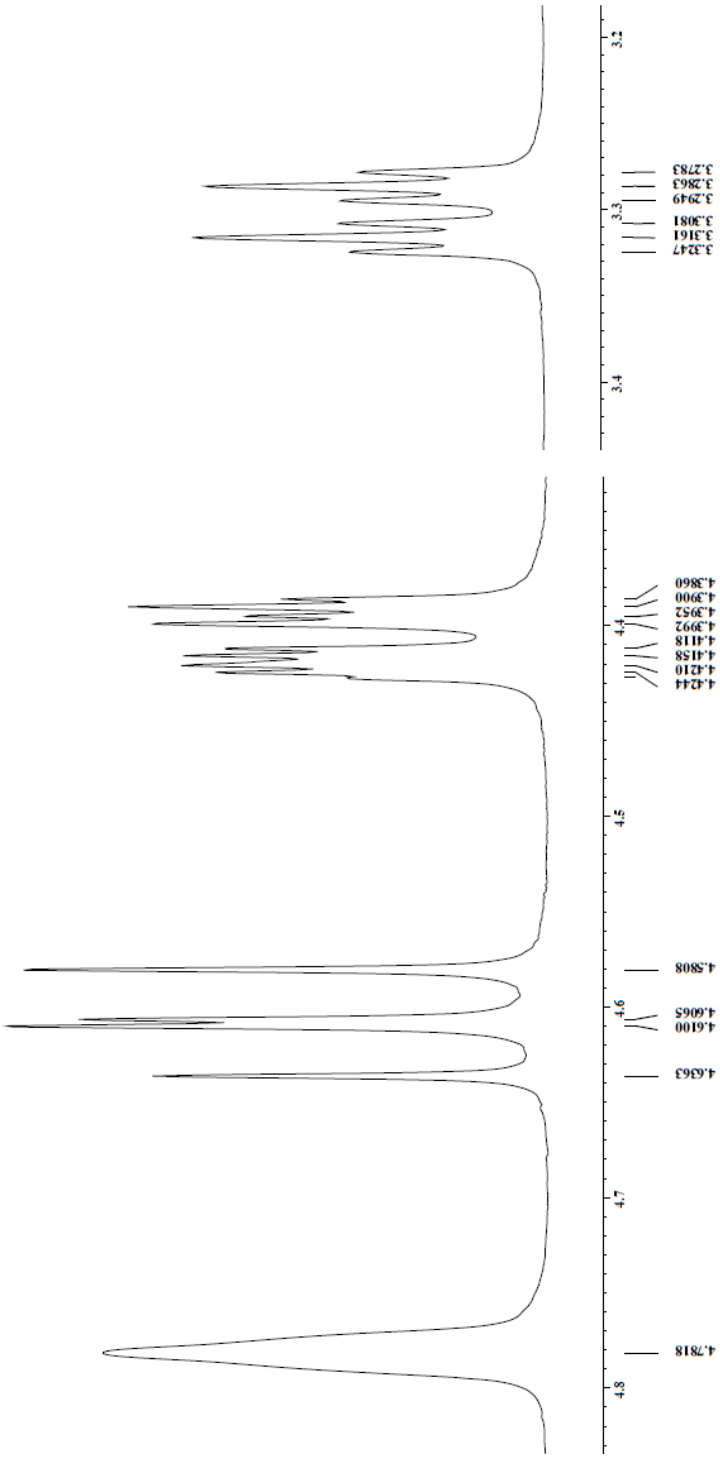

Fig.10a:^{1}H-NMR spectra of*cis-7,8-Dimethyisoflavan-4-ol(***2c)**

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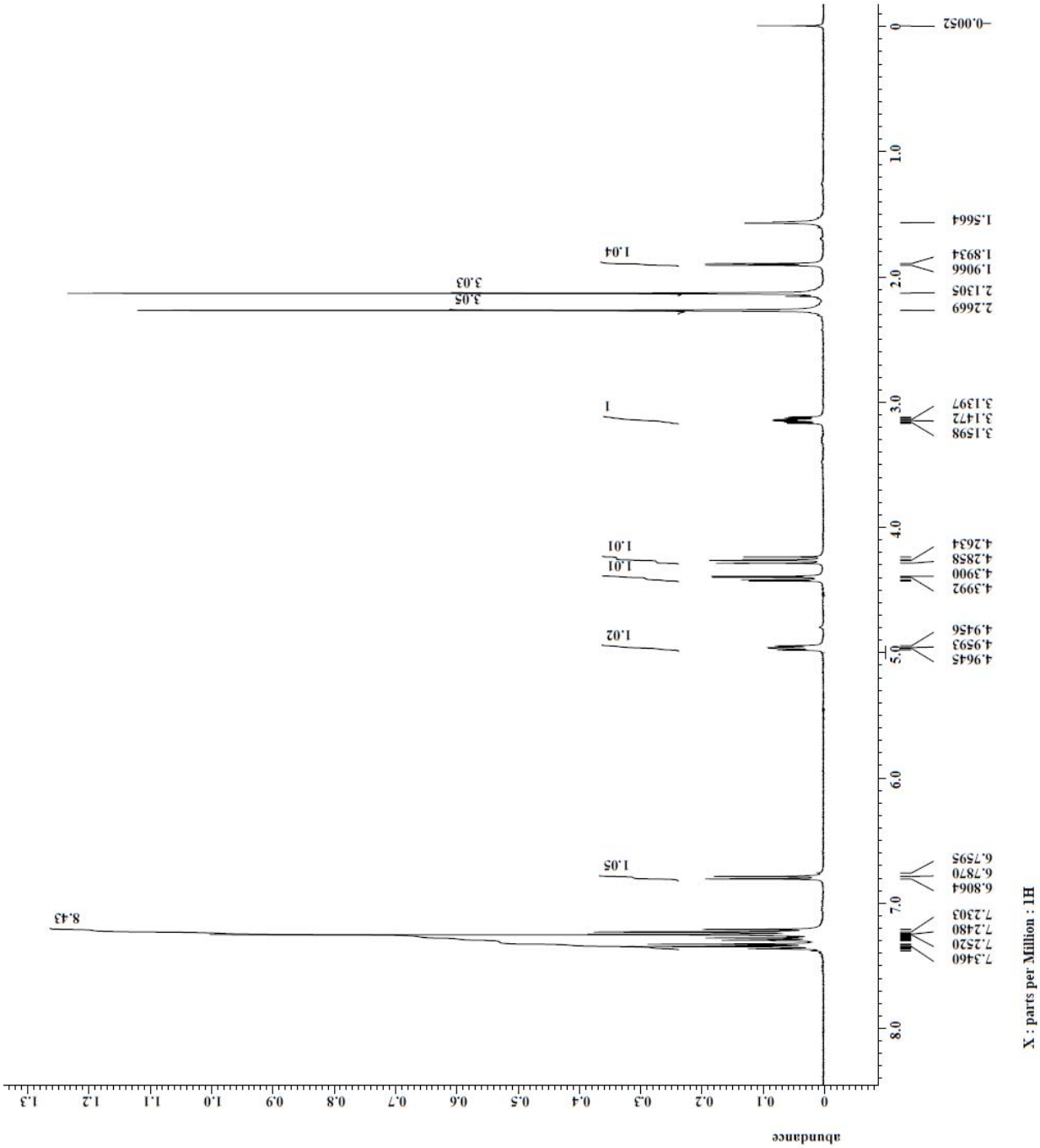

Fig.11: ^{1}H-NMR spectra of *trans-7,8-Dimethyisoflavan-4-ol* **(3c)**

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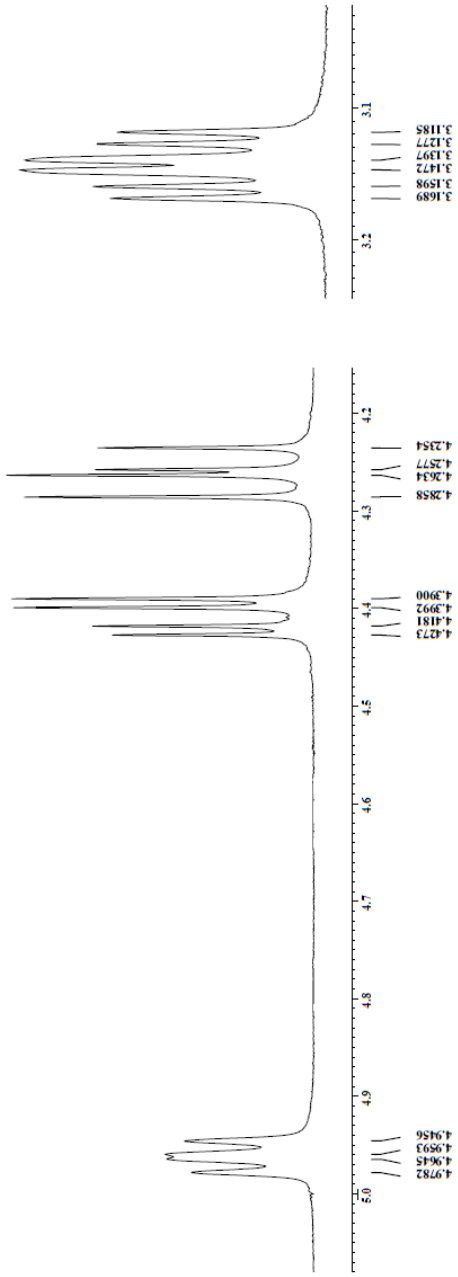

Fig.11a: ^{1}H-NMR spectra of *trans-7,8-Dimethyisoflavan-4-ol* **(3c)**

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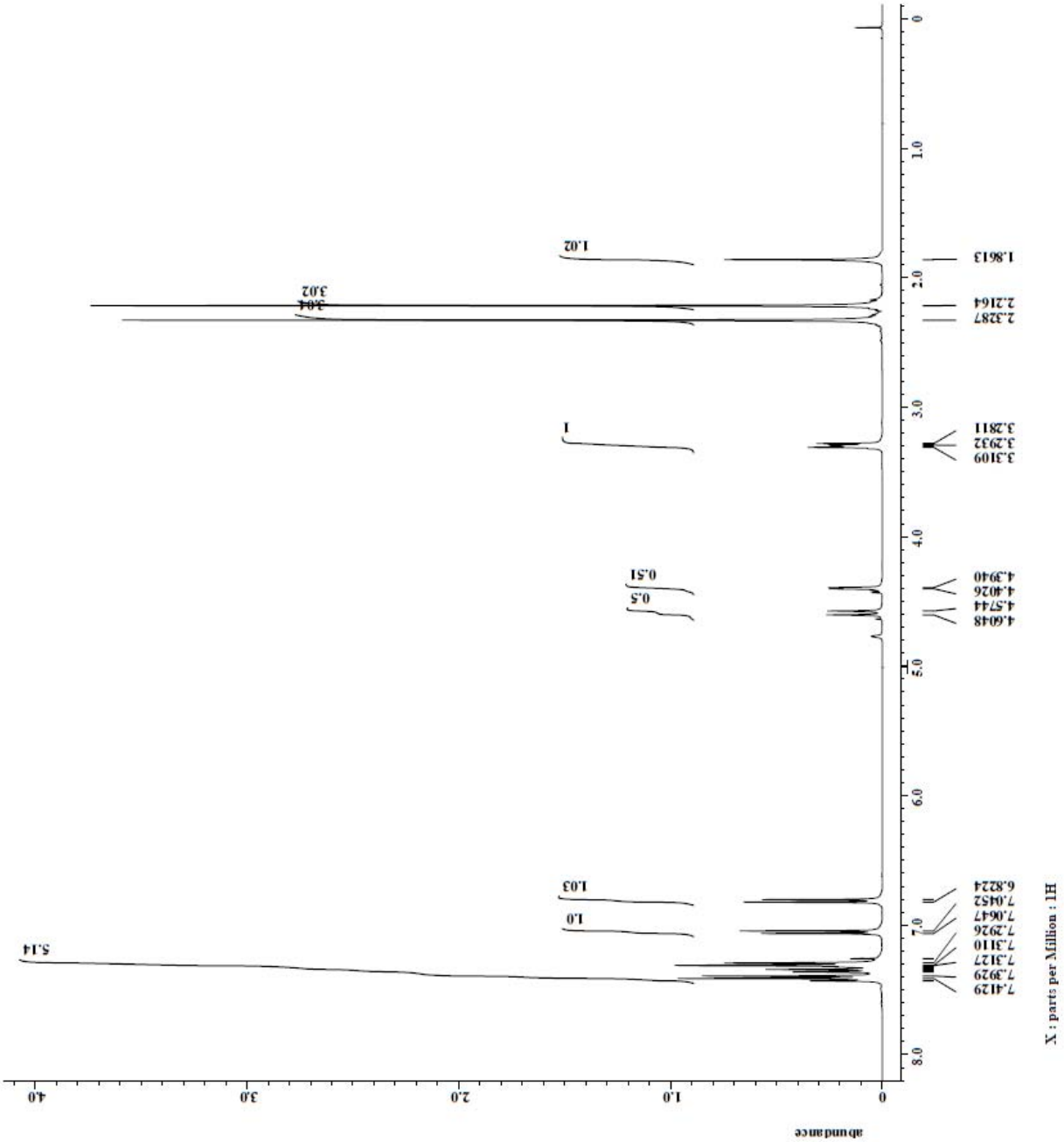

Fig. 12: ^{1}H-NMR spectra of *cis-7,8-Dimethyisoflavan-4-ol* **(8c)**

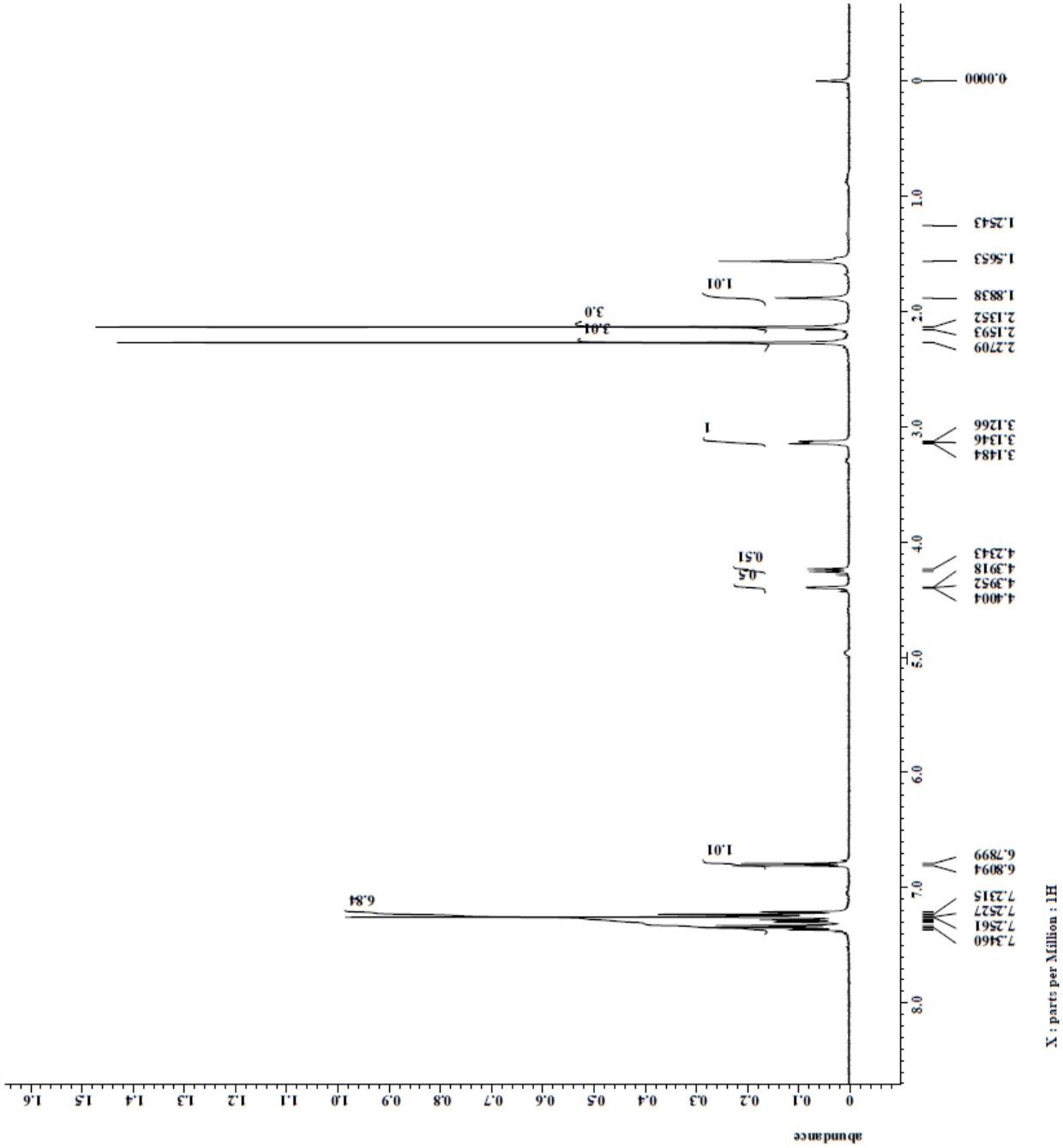

Fig.13: ^{1}H-NMR spectra of *trans-7,8-Dimethyisoflavan-4-ol* **(9c)**