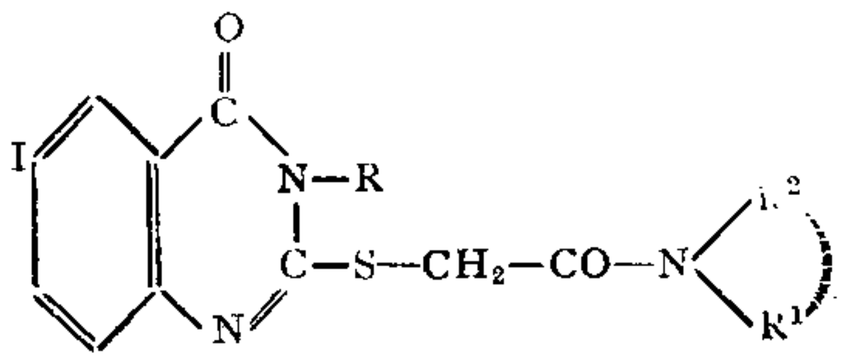
TABLE I

6-Iodo-2-mercapto-3-aryl-4-quinazolones

S. No.	Aryl group -R-	Yield %	M.P. °C.	Molecular formula	Nitrogen %		Sulphur %	
					Found	Calcd.	Found	Calcd.
1	*m*-Chlorophenyl ..	60	296	$C_{14}H_8N_2SOICl$	6·78	6·75	7·78	7·72
2	*o*-Methoxyphenyl ..	65	290	$C_{15}H_{11}N_2SO_2I$	6·80	6·83	7·54	7·82
3	*o*-Ethoxyphenyl ..	60	279	$C_{16}H_{13}N_2SO_2I$	6·29	6·60	7·46	7·55
4	*α*-Naphthyl ..	65	316	$C_{18}H_{11}N_2SOI$	6·35	6·51	7·54	7·44

TABLE II

6-Iodo-2-N, N–disubstituted carboxamidomethylthio-3-aryl-4–quinazolones



No.	R	R^1	R^2	Yield %	M.P. °C.	Molecular formula	Nitrogen %		Sulphur %	
							Fonnd	Calcd.	Found	Calcd.
1	*m*-Chloro phenyl- ..	Ethyl	Ethyl	60	206	$C_{20}H_{19}N_3SO_2ICl$	7·68	7·96	6·18	6·06
2	*o*-Methoxy phenyl- ..	,,	,,	65	134	$C_{21}H_{22}N_3SO_3I$	7·95	8·03	6·23	6·11
3	*o*-Ethoxy phenyl- ..	,,	,,	60	149	$C_{22}H_{24}N_3SO_3I$	7·63	7·82	6·04	5·95
4	*α*-Naphthyl- ..	,,	,,	65	190	$C_{24}H_{22}N_3SO_2I$	7·55	7·73	5·83	5·89
5	*m*-Chloro phenyl- ..	Methyl	Phenyl	55	230	$C_{23}H_{17}N_3SO_2ICl$	7·15	7·48	5·66	5·70
6	*o*-Methoxy phenyl- ..	,,	,,	60	197	$C_{24}H_{20}N_3SO_3I$	7·46	7·54	5·78	5·74
7	*o*-Ethoxy phenyl- ..	,,	,,	60	200	$C_{25}H_{22}N_3SO_3I$	7·25	7·36	5·55	5·60
8	*α*-Naphthyl- ..	,,	,,	65	217	$C_{27}H_{20}N_3SO_2I$	6·97	7·27	5·38	5·54
9	*m*-Chloro phenyl- ..	Ethyl	,,	58	237	$C_{24}H_{19}N_3SO_2ICl$	6·96	7·30	5·33	5·56
10	*o*-Methoxy phenyl- ..	,,	,,	60	236	$C_{25}H_{22}N_3SO_3I$	7·01	7·36	5·45	5·60
11	*o*-Ethoxy phenyl- ..	,,	,,	58	215	$C_{26}H_{24}N_3SO_3I$	6·95	7·18	5·31	5·47
12	*α*-Naphthyl- ..	,,	,,	65	225	$C_{28}H_{22}N_3SO_2I$	7·01	7·70	5·48	5·41
13	*m*-Chloro phenyl- ..	Benzyl	,,	60	189	$C_{29}H_{21}N_3SO_2ICl$	6·46	6·59	5·18	5·02
14	*o*-Methoxy phenyl- ..	,,	,,	65	213	$C_{30}H_{24}N_3SO_3I$	6·60	6·63	5·22	5·06
15	*o*-Ethoxy phenyl- ..	,,	,,	60	200	$C_{31}H_{26}N_3SO_3I$	6·38	6·49	5·11	4·95
16	*α*-Naphthyl ..	,,	,,	65	212	$C_{33}H_{24}N_3SO_2I$	6·35	6·43	4·82	4·90
17	*m*-Chloro phenyl- ..	Piperidino		65	134	$C_{21}H_{19}N_3SO_2ICl$	7·62	7·78	6·03	5·93
18	*o*-Methoxy phenyl- ..		,,	60	157	$C_{22}H_{22}N_3SO_3I$	7·56	7·85	6·16	5·98
19	*o*-Ethoxy phenyl- ..		,,	60	185	$C_{23}H_{24}N_3SO_3I$	7·54	7·65	5·88	5·83
20	*α*-Naphthyl ..		,,	64	140	$C_{25}H_{22}N_3SO_2I$	7·48	7·56	5·82	5·76

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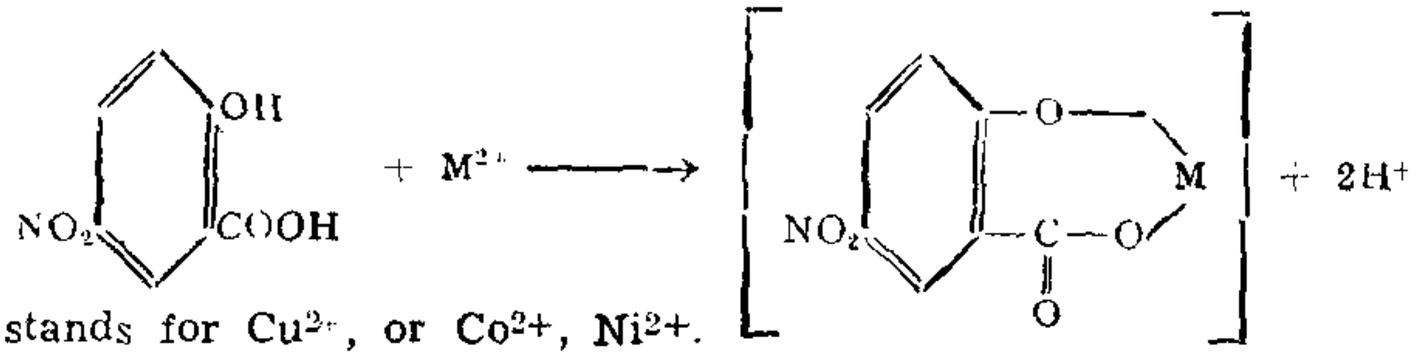
Dept. of Chemistry, K. S. L. SRIVASTAVA.
Banaras Hindu University,
Varanasi-5, *November* 20, 1967.

5-NITRO-SALICYLIC ACID AS A COMPLEX FORMING LIGAND

THE survey of the literature[1-4] of metal complexes with 5-nitro-salicylic acid has shown that not much work has been done on the formation of metal complexes with this acid. Here we report our results on the reactions of Cu(II), Ni(II), and Co(II) with 5-nitro-salicylic acid in aqueous medium by potentiometric and conductometric methods.



where M^{2+} stands for Cu^{2+}, or Co^{2+}, Ni^{2+}.

The potentiometric titrations of Cu(II), Ni(II) and Co(II) with 5-nitro-salicylic acid show a clear break at 1 : 1 indicating the formation of mono-5-nitro-salicylate according to the above equation.

For the conductometric measurements[7] different solutions were made by keeping the concentration of the metal constant and varying that of sodium-5-nitro-salicylate. In all cases the total volume was made constant by adding double-distilled water. When a graph is plotted between conductance and composition a clear break at 1 : 1 is obtained. This has been further confirmed by Job's method[5] of continuous variation at concentrations M/40, M/60 and M/80.

The value of the dissociation and stability constants have also been determined by Job's method[5] employing non-equimolar solutions. The results are summarised in Table I. The stability follows the order $Cu^{2+} > Ni^{2+} > Co^{2+}$ which is the order to be expected by the Irving-William's[6] rule.

TABLE I

	K	$\triangle F°$(K.Calories/mole)
Cu(II)–5–nitro salicylate	229·10	−4·9744
Ni(II)–5–nitro-salicylate	168·00	−3·0768
Co(II)–5–nitro-salicylate	81·28	−2·6394

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Chemical Laboratories,
Madhav College,
Ujjain (M.P.),
November 7, 1967.

A. V. PANDE.
R. L. AMERIA.
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CHEMICAL COMPOSITION OF A SPECIES OF *PORPHYRA* FROM VISAKHAPATNAM, S. INDIA

THE red seaweed, *Porphyra*, is a source of food in Japan, the British Isles, the Pacific coast of the United States, China and Philippines.[1-3] In India, only one of the species is found occurring at Visakhapatnam,[4-6] which has also been reported from Madras.[7] *Porphyra* is rich in vitamins A and B_{12} and contains a high amount of carbohydrate and protein.[3,8] This note presents the results of chemical analysis of the Indian species of *Porphyra*.

The material was collected from Visakhapatnam on the east coast of South India. The monostromatic membranous thallus is attached to intertidal rocks and forms a prominent zone at about high water mark. The plants were collected on March 14, 1967 and rinsed first with sea-water and then with freshwater, air-dried and powdered. The powder thus obtained was used for the chemical analysis throughout and the results are expressed as percentage on dry weight of the alga. Triplicate analysis was carried out by two independent workers and the two sets of results were found to be very close to one another.

The conventional micro-kjeldahl method using selenium catalyst was used to determine organic nitrogen and from this the protein content was calculated by multiplying by a factor, 6·25. Carbohydrate was estimated colorimetrically using anthrone-sulphuric acid reagent. Crude fat was extracted with petroleum ether (boiling range 40–60° C.) and the extract estimated. Sodium and potassium were estimated by flame photometry, phosphorus was estimated colorimetrically with Fiske and Subbarow reagent, and chloride by Vohlard's method. Sulphur content was determined by precipitation with barium chloride and moisture content by heating the algal powder at 110° C. till a constant weight was obtained.

The results obtained in the present investigation along with the results of Japanese